Caring beyond the farm gate

Humane Slaughter Association Annual Report 2007–2008

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.

Chairman's report

I am delighted to have the opportunity to comment on the Annual Report of the Humane Slaughter Association. As in previous years, hard work by the staff has enabled steady progress with the objectives of the Association. In particular, it was pleasing to see recognition in the Queen's Birthday Honours List, of James Kirkwood, Chief Executive, with the OBE for services to animal welfare.

The HSA has continued to collaborate with other bodies, including Defra, universities and commercial organisations, to develop more humane methods for the killing and processing of farmed animals, including fish and poultry. In particular, we are excited by the introduction of the new award to recognise major advances in the humane slaughter of farmed livestock, which we hope will help achieve wider recognition of new developments. This work is supplemented by visits to livestock markets and abattoirs to provide advice and when requested, to audit premises, staff procedures and practices, as a means of promoting best practice.

We are of course indebted to our members and supporters for making this valuable work possible, and I thank you most warmly for your support.



Bryan R Howard

Chief Executive's report

The HSA's main priorities are to:

- promote the development and observation of high standards of livestock welfare during transport, in markets and at slaughter through education, training and provision of advice, and,
- encourage and promote research into more humane methods of livestock transport, marketing and slaughter, where required.

Each year, specific tasks and targets are set within these priority areas (as illustrated in this Annual Report), and progress with these is monitored as the year progresses. Operating in this way, and with its practical approach, the charity has been highly productive and has played a major role in improving livestock welfare at slaughter in the UK and internationally. It has been able to do this thanks to the generosity and loyalty of its supporters whose help we most gratefully acknowledge on behalf of the charity. If you would like to find out more about the work of the HSA or to join us in promoting these aims please get in touch.



James K Kirkwood



Photograph credits Cover, cattle p1, sheep p2, cattle p3, pigs p6, sheep p7/8, chicken p9, lamb p10, cattle p11, chicken p14: courtesy Bluemoondog Pictures chickens p4, calf p4, water buffalo p5: Jade Spence

© HSA 2008. Published by HSA, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN, UK. Tel: +44 (0)1582 831919, Fax: +44 (0)1582 831414 Email: info@hsa.org.uk Web: www.hsa.org.uk

Printed on NAPM approved recycled paper

Research & Development



Animal welfare in markets

During the year the HSA completed an extensive Defrafunded survey to assess the welfare of sheep and cattle passing through livestock markets. The work was carried out in conjunction with the Royal Veterinary College and involved visiting no less than 32 markets across England, Wales and Scotland to observe the movement and behaviour of the livestock and make assessments of the facilities and management of the premises. The legislation relating to animal welfare in markets is now 18 years old and it is hoped the results of this survey will prove a useful reference to those responsible for drawing up new market legislation when it is required. A full report of the survey can be found on the Defra website at http://randd.defra.gov.uk/Default.aspx?Menu=Menu&Mo dule=More&Location=None&Completed=0&ProjectID=1 3761

New award to recognise advances in humane slaughter

During the past 100 years or so, great advances have been made in the field of humane slaughter of animals, and work in pursuit of further improvements is continuing. The HSA is pleased to announce a new award to recognise individuals or organisations whose work has resulted in significant advances in the humane slaughter of farmed livestock.

The award is for £1000 and is open to those who have made significant contributions to the welfare of farmed animals at slaughter, either in the past or more recently. The HSA is keen to receive applications or nominations relating to:

- advances in science that have led or are leading to advances in humane slaughter
- important technological developments that have led or are leading to advances in humane slaughter

Individuals or organisations are encouraged to apply and we are also keen to receive nominations of potential candidates for this award from third parties. Details on how to apply or to make nominations are available at www.hsa.org.uk or from the HSA office.

Poultry welfare at slaughter

At the time of slaughter, the majority of poultry are suspended by their legs on shackle lines for stunning using electrical waterbaths. The HSA and other interested parties are collaborating on a Defra-funded project that aims to reduce stress and discomfort for poultry at this time. Inverting and shackling conscious birds may cause them pain, and alternatives to this practice are likely to greatly improve the welfare of these birds. Wing flapping and pre-stun shocks can be a common side-effect of shackling and the project also aims to reduce their occurrence. The practical application of the results of this study should allow businesses to undertake simple modifications to their existing shackle lines to provide a rapid advance in handling technology and a real difference to the welfare of poultry stunned using the electrical waterbath method.

Head-only stunning of poultry – a potential benefit for animal welfare and meat quality

The HSA has recently joined a new scientific research project that will investigate how to adequately stun poultry using electrical waterbaths without compromising meat quality. The work is being carried out by Silsoe Livestock Systems Limited, the University of Bristol, Sun Valley Foods and Paul Berry Technical Limited. Over the next 18 months the HSA will be assisting with the project trials and assessing the effect of the new technology on poultry welfare. The project represents an innovative approach to finding alternatives to whole-body stunning of poultry, which can lead to downgrading of carcases. The potential advantage of head-only stunning is that it may be less likely to affect the carcase quality, while promoting bird welfare.





Backyard slaughter of poultry

Hobbyists and small-scale producers of poultry may sometimes be faced with sick or injured birds, or may wish to dispatch one of their flock 'for the table'. The methods available for the dispatch of poultry under these circumstances are not always ideal for the birds, since some may involve a degree of discomfort, pain and suffering. The methods that the HSA believes to be the most humane hand-held electrical stunners where electrodes are applied to each side of a bird's head or mechanical concussion stunners - are not used by all smallholders or flock owners due to their expense and so other, less satisfactory, methods are often used instead. The HSA is currently reviewing the available options, which include, in addition to those mentioned above, neck dislocation and decapitation. The review will look at the effects on welfare of the various methods. The results of this work will be used to make recommendations for future scientific research and/or for technical developments where the HSA believes these are warranted.



Assessment of automated bleeding system for salmon

The HSA was invited to assess a new system for bleeding salmon after percussive stunning in a commercial harvesting environment in Mallaig. The automated bleeding system sits behind an improved percussive stunner and bleeds the fish immediately after the stun, thus helping to ensure the fish do not regain consciousness.

The charity is playing an increasing role in assessing equipment for manufacturers and offering advice on how to improve aspects of design critical to animal welfare. In the absence of regulation on design of equipment marketed as humane, the HSA provides an independent and objective evaluation with pragmatic advice that is aimed exclusively at improving the welfare of farmed fish.

Water buffalo slaughter

The collaborative project involving the HSA, the Royal Veterinary College (RVC) and ADAS is now nearly completed. The field work was finished in April and the final report and scientific paper are now being finalised. The project was in two parts: the first being a series of assessments of water buffalo being stunned and bled in a commercial slaughterhouse; the second part saw more practical involvement by the HSA technical staff over-thirty-month (OTM) water buffalo were stunned by Charles Mason, using three different models of captivebolt instrument and the animals assessed visually for signs of effective stunning. Following removal of the brain-stems Transmissible Spongiform for Encephalopathy (TSE) testing, the heads were taken to the RVC for post mortem examination.

Results show that water buffalo can be effectively stunned using appropriate, high-powered captive-bolt equipment, when applied carefully in the appropriate position and at the correct angle. The HSA hopes the results of this work will assist in the drafting of the new EC slaughter legislation, which is currently



Harvesting of farmed turbot

In June 2008 the HSA assessed a new electrical stunning system for turbot in Anglesey. The concept of the stunner was developed in an extension of the Defra-funded Link project on the humane slaughter of halibut, and is the first commercially available electrical stunning system for turbot. HSA technical staff were involved in the initial research on the humane harvesting of turbot through the EU-funded 'Stun Fish First' project that was led by Dr Hans van de Vis from the Netherlands. Some of this research has been incorporated in the design of the new stunning system. The HSA welcomes opportunities to assess new fish harvesting systems and to offer advice on how the designs can be improved to better safeguard the welfare of farmed fish during harvest.



HSA education & training initiative

The HSA is expanding its training initiatives and will be launching a training brochure as part of this drive. The training brochure will feature lectures and courses of interest to a wide range of individuals, companies and organisations: large-scale processing companies; those who require guidance with on-farm slaughter or who need to obtain a poultry slaughter licence; universities or colleges specialising in agricultural, veterinary or animal welfare subjects; and general interest groups such as the Womens' Institute. If you or your company would like details of HSA lectures and courses please contact the office at info@hsa.org.uk or on 01582 831919.

152

Access to training through collaboration

The HSA technical team received a positive response after delivering an animal welfare course at Dingwall Livestock Market. The course was organised by Food Industry (North) Development Services (FINDS) for slaughtermen, livestock auctioneers, lairage staff and stockmen, and covered the welfare of animals during transport, in markets and at slaughter. The collaboration with FINDS has brought animal welfare courses to the Scottish Highlands where such courses have been of limited availability despite the size of the livestock industry. On this occasion, a translator was present to translate the lectures into Polish for two employees. This is a significant step as there are a large number of workers in the animal processing industry who do not have English as their first language. The HSA hopes to continue such collaborations which make animal welfare training more accessible.

HSA publications

The provision of up-to-date information on technical developments and best practice is a key element in the HSA's work of achieving high standards in food animal welfare. A wide range of Guidance Notes, Best Practice Guidelines, Technical Notes, booklets and training materials is available for all those involved with livestock and poultry handling, transport and slaughter, plus a range of Fact Sheets for the general reader.

For a full list of publications and training materials visit www.hsa.org.uk or contact the HSA office.

The following publications have been issued during the year or are in preparation:

Guidance Notes

Humane Handling of Livestock Welfare of Fish During Transport In preparation Electrical Waterbath Stunning of Poultry In preparation Controlled Atmosphere Stunning (CAS) of Poultry In preparation

Best Practice Guidelines

Ducks and Geese in Processing Plants Group Stunning Systems

Technical Notes

Slaughter and Killing of Minority Farmed Species Transport of Farm Animals and Horses Transport of Poultry Transport of Farmed Fish

Fact Sheets

History of the HSA. Making Progress *Revised edition* Transport of Animals. Moving Forward? *Revised edition* Livestock Markets. Animal Handling and Welfare *Revised edition*



Dorothy Sidley Memorial Award 2008 - Ilamas and sheep in Bolivia

The HSA is pleased to announce the 2008 Dorothy Sidley Memorial Award winner: Ms Georgina Limon Vega who is currently studying for an MSc Veterinary Epidemiology degree at the Royal Veterinary College, UK. The £1500 award is helping to support Ms Vega's research project in Bolivia which aims to evaluate the welfare of llamas before and during slaughter and identify the main welfare issues. It is hoped the project could form the basis of further research and lead to published recommendations for llama welfare. Along with llamas, sheep are also slaughtered at the same abattoir which serves the communities that Georgina is visiting, and their welfare will also be assessed. We wish Georgina the best of luck with this venture and look forward to receiving her report later in the year.

2009 Dorothy Sidley Memorial Awards!

The 2009 Dorothy Sidley Memorial Awards will be advertised later this year and we look forward to applications for support from those who wish to propose projects related to the marketing, transport or slaughter of farmed animals. For this coming year the HSA will also suggest areas of research that we consider worthy of investigation. Potential subjects, for example, a review and assessment of the efficacy of the different types of automated bleeding equipment used in poultry processing plants, will be included in the Dorothy Sidley leaflet due to be published later in 2008.

Exhibitions

The HSA exhibited at two events during the last year – **NSA Sheep 2008** (National Sheep Association) and the **Pig and Poultry Fair** – with a lot of interest being shown in HSA publications and training services, including from increasing numbers of smallholders and agricultural colleges.

The HSA will also be exhibiting at the **Association of Meat Inspectors Euroseminar** in September 2008, at which Charles Mason, HSA Technical Director, will be speaking.

Poultry welfare in processing plants

In October 2007 the HSA provided training for staff from a leading poultry processor who were aiming to become Poultry Welfare Officers within their processing plants and therefore required suitable training to meet objectives in their new roles. The training was requested by Easton College, Norwich on behalf of a major supermarket and was delivered over two days in association with Stephen Lister of Crowshall Veterinary Services and the Farm Animal Welfare Council. Mr Lister taught the first day of the course, which focussed on poultry welfare on-farm. The second day was delivered by the HSA and dealt with poultry welfare during catching, transport and slaughter. The course was met with good reviews from the participants and was considered a successful two days.

In March 2008 the HSA travelled to Northern Ireland to provide refresher training for Poultry Welfare Officers in a processing plant. This one-day course was well received, and covered chickens and turkeys within electrical waterbath systems.

Training in practical slaughter of poultry

In April 2008 the HSA provided a training day for members of the public who needed to obtain a poultry slaughter licence for on-farm processing of birds. The day began with attendees receiving a lecture on the correct methods for capture, handling and restraint of poultry, followed by the principles of humane stunning and killing and how to achieve this using certain pieces of equipment. All delegates successfully attained their Certificates of Competence enabling them to obtain their registered poultry slaughter licences.

Slaughter licences are required when slaughtering poultry for a commercial purpose, using specific types of equipment. If you would like to know if you require a slaughter licence or details of how to obtain one, please contact either your local Animal Health office or the HSA for details of training days.

A moral dilemma

Last year Charles Mason was invited to speak at the Goat Veterinary Society's (GVS) autumn meeting which took place in early November near Wootton Bassett in Wiltshire. The GVS asked Charles to give a paper on the alternative, legal methods available to goat keepers for the humane destruction of unwanted male kids. This is a difficult and emotive subject on which there is a variety of strongly held views. As well as taking the audience through the methods available, the presentation discussed possible ways of avoiding the killing of these animals, including the possible use of sexed semen and expanding the market for goat meat. A full version of the paper can be found in the 2008 GVS Journal.

Firearms training

The past year has been a very busy one for the HSA in terms of firearms training. The HSA's Technical Director, Charles Mason, has led six two-day firearms courses and four refresher courses for Animal Health veterinary staff, as part of the government's contingency plan for control of animal diseases. The courses so far have taken place in Worcester and have made good use of the West Mercia Police Firearms Training School at Hindlip Hall. The main course comprises two full days: the first being classroom-based and dealing with all aspects of firearms, captive-bolt equipment and use of dart-guns. The second day is at the 40 metre outdoor range at Hindlip Hall, where the delegates get hands-on experience of operating the equipment and also learn basic cleaning and maintenance. The course finishes with a short written test.

The refresher course lasts a dayand-a-half, and includes distance estimation and risk assessment. Although Animal Health staff will not, as a rule, carry out the actual culling of diseased animals, their will be supervising role contractors, for which they need a broad knowledge of the equipment they are likely to encounter and the and associated risks their management.

In addition to these courses, 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, on demand. This year the RSPCA introduced a new course for selected inspectors on the use of shotguns and the HSA played a central role in both the training course at Bisley and the procurement of the hardware.

Certificates of transport competence now mandatory

The requirement for certificates of competence for drivers of livestock vehicles and accompanying animal attendants is now fully in-force, under European Council Regulation (EC) No 1/2005 on the protection of animals during transport and related

operations. Training courses for those new to livestock transport are available through the National Proficiency Tests Council (NPTC) and other organisations listed on Defra's Welfare at Transport web pages. Further information on the welfare of livestock, horses, poultry and fish during transport is available on the HSA website's Technical Note section and can be downloaded free-of-charge. Alternatively, printed copies can be ordered from the HSA office for a small charge.

HSA Technical Officer Jade Spence represented the HSA, and presented a lecture on driving style and welfare during transport, at the Pig Veterinary Society Spring Meeting in May in Edinburgh. Caring be



International

Romania

Following his visit to Romania last September to speak at a conference organised by the International League for the Protection of Horses (ILPH), Charles Mason was invited to the ILPH offices in Norfolk to progress the work further with four of the veterinary surgeons who attended the forum in Bucharest. The meeting took place in February and the four delegates undertook more detailed training in the use of firearms for the humane destruction of horses.



Farm animal welfare and sustainable agriculture

James Kirkwood was invited to speak at the International Forum on 'The importance of farm animal welfare science to sustainable agriculture' organised by the Chinese Economists' Society for the Forestry, Livestock & Fisheries Industries, with CIWF, HSUS International, RSPCA and WSPA, in Beijing, 29-30 March 2008. Like everything else in China, interest in animal welfare is growing rapidly.

In-store slaughter of carp

The expansion of the EU has brought about new markets for large retailers from the older members of the Union. UK retailers have tapped into this emerging market with UK-style superstores that offer both new and traditional goods. One such traditional product is live fish, which has introduced new challenges for such retailers. In Hungary, carp is considered a delicacy that is best bought fresh. As a result, live fish fetch a high premium and are killed in-store for the customer. This presents unique animal welfare challenges in keeping live fish as well as in killing.

A leading UK retailer contracted the HSA to assess its current in-store carp slaughter systems with the aim of improving standards. The HSA observed fish being sold and slaughtered in the retailer's largest store in Hungary and met the technical and sales staff to discuss their systems. The outcome of the review and assessment consisted of a fish welfare policy, a training manual, standard operating procedures and advisory posters. The HSA was pleased to learn that the retailer intends to incorporate these into its standards and training for other stores in Europe, Asia and the Americas that slaughter fish in-store.

Visits & Audits

To help establish high welfare standards, the HSA regularly undertakes visits to markets and abattoirs, and is increasingly being asked to assess, advise and audit equipment, systems and procedures.

Visits to livestock markets

Following the foot and mouth disease and avian influenza outbreaks during the last year, there has been much disruption to the livestock industry and not least for the auction marts. Despite this, in 2008 the HSA visited Ballymena Livestock Market in Northern Ireland and Cirencester Market. Both markets are relatively new – approximately two years old. Another town with a new market is Rugby. The original site for Rugby Livestock Sales closed after 130 years and now has a new venue at the Royal Agricultural Society of England, Stoneleigh Park, Warwickshire. Although it was not operational at the time of the HSA visit to the Pig and Poultry Fair (also held at Stoneleigh Park), the technical team hope to return later in 2008 to see the new Rugby Farmers' Mart in action.

Abattoir audits

The past year saw the HSA being invited to assess the handling and facilities at four red meat abattoirs around the UK. The HSA was able to assess the facilities, staff training, animal handling procedures, animal welfare policies and equipment used to stun and kill animals. Each abattoir received a comprehensive report, with objective and independent assessments of their operations and ideas for improving the welfare of the animals under their care. The HSA also visited another red meat plant, to keep abreast of new developments and monitor standards as well as two other abattoirs where collaborative research was being undertaken by the HSA. We are grateful for continuing opportunities to work with the industry towards improving the welfare of red meat animals at slaughter.

New-look website

The past year saw the HSA website receiving a fresh lick of paint. The site now incorporates some of the old popular content as well as many new pages. The design is intended to make navigation easier and to capture the interest of both the animal processing industry and the general public. It is regularly updated to include the latest news, publications and technical information. The new website has a higher ranking on popular search engines and is therefore attracting more traffic. Development of the website will continue into the next year with a focus on making it more user-friendly and informative.

Administration & Finance

General Meeting 2007

The General Meeting was held at the Women's Institute Hall, 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 2006 and resolved to receive the Accounts and Auditor's Report for the year ended 31 March 2007. 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 Yianni, Neil & Co Ltd, Registered Auditors, be appointed as auditors to HSA.

There were no new candidates for election and in accordance with Clause 45 of UFAW's Articles of Association Professor A Nolan, Dr J C Anderson and Mr A G Sains were re-elected.

Notice of General Meeting 2008

The General Meeting of the HSA will be held at 3.00pm on Wednesday 15 October 2008 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 2005 Statement of Recommended Practice – Accounting by Charities (SORP) and applicable UK Accounting Standards, which were approved by the Trustees and signed on its behalf on 9 July 2008.

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 15 October, 2008. Full accounts, and the audit report can be obtained from the HSA Secretary, The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN.

Accounts

SUMMARY OF FINANCIAL ACTIVITY YEAR ENDED 31 MARCH 2008

BALANCE SHEET AS AT 31 MARCH 2008

		2007/08 ج	2006/07 £		2007/08 £	2006/07 £
Incoming resources		400,904	306,653	Fixed assets:	~	~
				Tangible fixed assets	311,937	193,289
Less:	Costs of generating funds	19,423	18,199	Investments	1,676,243	1,686,709
	Charitable activities	159,404	325,675			
	Governance costs	2,252	3,433		1,988,180	1,879,998
	Other resources expended	45,600	41,822			
	Total resources used	226,679	389,129	Current assets:		
				Debtors	79,617	15,032
				Deposits at bank	220,829	100,000
Net incoming/(outgoing) resources		174 005	(00.476)	Cash at bank & in hand	41,964	61.869
in year		174,225	(82,476)		342,410	<u>176,901</u>
Other recognised gains and losses:				Creditors		
Loss on disposal of assets		_	(474)		(14 602)	(20,405)
		30,046	73,130	Amounts falling due within 1 year	(14,692)	(20,405)
Net realised gain on investments		,	,	Net current assets	207 710	156,496
Unrealised (loss) on investments		(44,867)	(65,301)	Net current assets	327,718	150,490
Gain on revaluation of tangible fixed assets		120,000		Net assets	2 215 909	2 026 404
Net movement in funds		279,404	(75,121)	Net assets	2,315,898	2,036,494
			(, , ,	Funds:		
				Designated	-	784
Balance brought forward		2,036,494	2,111,615	Unrestricted	2,315,898	2,035,710
				0000.000	2,315,898	2,036,494
Balance carried forward		2,315,898	2,036,494		_,,	_,,.
		, ,	, .			

The summarised accounts were approved by the Trustees and signed on their behalf on 9 July 2008

BR Hand

Bryan R Howard BVMS PhD MRCVS Chairman

ho But

Michael T Bird FCA **Hon Treasurer**

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 9 July 2008.

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 2008.

LILIZ (0 LLI

Yianni, Neil & Co Ltd, Registered Auditors, London, 9 July 2008

The Humane Slaughter Association and Council of Justice to Animals (Registered in England Charity No. 209563)

Vice-Presidents:	Professor R S Anderson W M Brancker CBE DU J Drummond Thompson Professor A M Johnston Professor J E T Jones F I J Lean BSc PhD CBiol G D Sales BSc PhD AK J Sanford BVSc PhD FF	niv FRCVS OBE BVM&S DVetMed FRSH DipECVPH HonFRCVS PhD MRCVS FRCPath MIBiol C MIBiol DipTCDHE	
Trustees			
Chairman: Vice-Chairman: Honorary Treasurer:	B R Howard BVMS PhD MRCVS H Pratt BVM&S DVSM FRCVS A T Bird FCA C Anderson BVMS DVM FRCPath FIBiol MRCVS PhD Professor R M Bennett BSc MSc PhD Professor P M Biggs CBE DSc DVM FRCPath CBiol FIBiol FRS FRCVS Brown BVSc BA PhD MBA FRCVS Professor K Kendrick BA PhD FIBiol Professor V Molony BVSc MSc PhD MRCVS Professor A Nolan MVB DipECVA DipECVPT DVA MRCVS A Radford OBE LLB G Sains NDA CDA		
Staff			
Chief Executive & Scientific Director: Secretary: Technical Director: Technical Officer: Technical Officer: Public Relations & Fundraising Officer: Veterinary Adviser:	rector: James K Kirkwood BVSc PhD CBiol FIBiol MRCVS Donald C Davidson Ctor: Charles W Mason HND MInstM Cer: Jade Y Spence BSc MSc AMIBiol Cer: Ambrose Tinarwo BSc MSc PhD ns Officer: Brian D Pemberton BA MA		
Office Staff:	Samantha Griffin Wendy L Goodwin	(to 31.08.07)	
	,		

Yianni, Neil & Co Ltd, Everlast House, 1 Cranbrook **Registered Auditors:** Lane, New Southgate, London N11 1PF Bankers: HSBC Bank plc, 171 Darkes Lane, Potters Bar, Herts EN6 1BU Solicitors: Bignalls Balderston Warren & Co, 11 Whitehorse Street, Baldock, Herts SG7 6PZ Hempsons, Hempson House, 40 Villiers Street, London WC2N 6NJ RadcliffesLeBrasseur, 5 Great College Street, Westminster, London SW1P 3SJ Investment Advisers: Smith & Williamson Investment Managers, 25 Moorgate, London EC2V 5NS Offices: The Old School, Brewhouse Hill, Wheathampstead, Herts AL4 8AN Tel: +44 (0)1582 831919 Fax: +44 (0)1582 831414 Email: info@hsa.org.uk www.hsa.org.uk



Humane Slaughter Association

The Old School, Brewhouse Hill, Wheathampstead Herts, AL4 8AN, UK Tel: +44 (0)1582 831919, Fax: +44 (0)1582 831414 Email: info@hsa.org.uk Web: www.hsa.org.uk

Registered in England Charity No. 209563 ISSN 0264-8741