Forensics in Kenya

BSAVA contributed a £600 grant to enable John and Margaret Cooper to take their expertise to Kenya to provide a much needed one-day forensics workshop

We are indebted to the BSAVA International Affairs Committee for its generous donation, without which it would not have been possible to organise the One-Day Veterinary Forensics Workshop in Kenya last May”, says Professor John Cooper, who travelled with his wife Margaret to Kabete earlier this year.

The University of Nairobi, Faculty of Veterinary Medicine is in Kabete, about 10 km outside the city. The meeting was organised by a committee established by the Faculty’s Department of Veterinary Pathology, Microbiology and Parasitology and chaired by Professor Peter Gathumbi.

As visiting members of staff at the University of Nairobi, the Coopers had already presented a seminar that drew attention to the parallels between ‘human’ and ‘animal’ forensic investigations and the benefits of interdisciplinary exchange of expertise. This was in November 2010, and they argued that there was a need to raise more awareness, not only at the University but also amongst other institutions and authorities in Kenya and East Africa.

So this workshop at Kabete was the first step in an ambitious programme which is aimed at the introduction by the University of a Certificate or Diploma, and subsequently (subject to Senate approval) a Master’s degree in Forensic Science. In all these ventures the emphasis will be on comparative forensics, linking animal, human and environmental studies, because these are all closely interrelated in East Africa.

Interdisciplinary challenge

John says that there is a great need for national and regional training in forensic science in many parts of the world. Kenya, in common with many other developing countries, faces diverse challenges in terms of law enforcement and the protection of human rights, and the police and other authorities have many conflicting demands on their time and resources.

The participants on the workshop came from a range of disciplines, with strong veterinary representation. Originally 40 participants were expected, however on the day 178 were registered. Such a response was most encouraging but led to some logistical problems, especially in respect of catering, provision of course notes and the practical sessions. But this was all dealt with efficiently.

More than a lecture

The day offered more than a didactic programme of lectures and demonstrations. During registration, refreshments and lunch, registrants were able to view literature from various organisations, including the BSAVA. There was also a display of forensic equipment relating to basic techniques, crime scene investigation, the collection of evidence, laboratory techniques, report-writing and appearing in court.

The morning session was chaired by Professor Philip Nyaga, a veterinary virologist, who first introduced to the audience Dr Victor Yamo, Chairman of the Kenya Veterinary Board (KVB – the disciplinary and regulatory
body for the veterinary profession in Kenya. Dr Yamo welcomed delegates and outlined the role and responsibilities of the KVB, especially in the light of new legislation that has recently gone through Parliament. He confirmed that veterinarians attending the Workshop for the whole day would be eligible for CPD credits.

A UK perspective

Professor Nyaga then welcomed the first lecturer, our own Professor John Cooper, who is a long-standing member of the BSAVA and an editor of some of its Manuals. Professor Cooper introduced the concept of forensic investigation and described its history. He discussed its various subdisciplines and branches and outlined the many advances that have taken place over the past two decades.

Professor Cooper drew attention to the importance in forensic work of sound observation, an intact chain of custody and the proper collection, storage and presentation of evidence. He presented examples of different applications of forensic medicine and stressed that there is little difference in approach and technique between, for example, the investigation of abuse of an animal and examining and interpreting injuries caused by assault in a human victim.

This was followed, after coffee, by a presentation by Margaret Cooper. The emphasis of her lecture was on legal issues. She explained the principles of national, regional and international legislation, with particular reference to Kenya, and related these to the health, welfare and conservation of animals. Mrs Cooper described court procedure and provided basic guidelines for those likely to appear as expert witnesses.

A Kenyan view

There followed a lively session in which two members of the veterinary profession in Kenya, Dr PG Mbuthia and Dr JM Mbaria, presented forensic cases that they had personally conducted. They also discussed how to manage the extraneous personal, social and political challenges that can also arise.

The next speaker was Mr Moses Otiende, a scientist with Kenya Wildlife Services (KWS) whose subject was the wildlife and forensic interlink. He introduced his lecture by reminding the audience of the toll inflicted on African wildlife and environment by illegal acts, particularly poaching.

Such activities warranted investigation by the appropriate authorities and, when sufficient evidence had been collected, arresting those involved and taking them to court. This, however, was not always easy, especially in East Africa, where distances are great and law enforcement in isolated locations is neither easy nor safe. He concentrated particularly on the value in forensic investigations of DNA and other molecular techniques and announced that KWS was to establish its own DNA laboratory.

Welfare

The final speaker of the morning was Mrs Jean Gilchrist from the Kenya Society for the Protection and Care of Animals (KSPCA). Her topic was animal cruelty and she detailed typical cases with which the KSPCA deals on a regular basis. Mrs Gilchrist gave examples of injuries sustained by animals – domestic livestock, donkeys, dogs and cats. She discussed possible links between violence in the home and abuse of animals and stressed the need for more research on this possibility in East Africa.
Other issues relating to the welfare of dogs and cats were also covered during the Workshop. They included the widespread problem of stray animals, dog-fighting and the use of dogs to poach wild animals (serious injuries can result, many of which are not reported and usually inadequately treated).

In recent years attitudes towards the keeping of domestic pets in Kenya have started to evolve. This was pointed out in an article in a 2010 edition of ‘Saturday Nation’, entitled Fighting apathy against domestic pets, which argued that one reason why the proper care of dogs and cats has not been given the attention it warrants in Kenya is probably because the culture of animal welfare is not well established. This is, perhaps, not surprising in a country where human poverty is rife and where, at the time of writing, millions face starvation.

As the KSPCA put it when interviewed by the newspaper: “Poor people struggle to balance between buying food and feeding pets”. However, as a middle-class grows in Kenya – with many people’s aspirations based on “Western” values – the situation is changing.

It is important to emphasise that it is not just the KSPCA that is promoting animal welfare; the Kenya Veterinary Association (KVA), a thriving and sometimes outspoken professional body, is also active in this area.

Getting practical
The afternoon session was devoted to practical work. Registrants were divided into groups and technicians, appropriately clad in white coats and armed with laboratory “timers”, were drafted in to ensure a strict timetable so that each group could experience – and to a certain extent participate in – the various activities.

Mr Laban Njoroge (KEMRI/NMK) led the session on forensic entomology. He demonstrated live and dead invertebrates, explaining their importance in forensic investigations, either as indicators of the time of death of a human or animal or of the movements of a suspect or a victim.

A second practical session, led by Professor John Cooper and Mr Mwebi Ogeto, was entitled “Bones hair and bodies… hands-on examination of specimens”. The two tutors showed participants examples of bones, skin, hair and other human and animal derivatives and demonstrated how these should be handled, examined and sampled when carrying out a forensic investigation.

The third practical session incorporated a discussion of case scenarios, led by Mrs Margaret Cooper. She presented various forensic situations and invited comments on the use of the evidence in court. The fourth and final component was an illustrated session on post-mortem protocols and sampling, led by Professors PK Gathumbi and PN Nyaga and Dr PG Muthia. The participants were shown how to differentiate normal from abnormal appearances in carcasses and tissues, and guided in the correct and unambiguous recording of observations and inferences.

All the practical sessions proved very popular and it was clear, both from registrants’ comments and their suggestions on the questionnaire (distributed to all attendees) that, as is usual in such workshops, more time and greater hands-on involvement in the practical demonstrations would have been appreciated and beneficial.

Making a difference
The day ended with a Summing-up and Closing Ceremony attended by the Dean of the College of Agriculture and Veterinary Sciences and the Head of the Faculty. All who addressed the audience complimented Professor Peter Gathumbi and his team on an excellent day. There were presentations of literature to the College and signed certificates were provided for all those who had attended.

“This new venture into forensic education in Kenya is a credit to the University of Nairobi, which has recognised the need for integrated training in forensics,” says Professor Cooper. “We and our Kenyan colleagues have received many messages from participants, expressing their appreciation of the Veterinary Workshop and expressing hope that other related educational events will take place in the future. With this in mind, we have agreed with Professor Gathumbi and his team that we shall participate in a second Workshop, this time lasting two days and with far more practical tuition, in 2012. This could be another step towards the development of a Diploma or Master’s course in forensics in Kenya.”