“Animal Companions for Life”

August 21st 2008
Welcome to the Animal Welfare Science Centre’s “Animal Companions for Life” research day.

The Animal Welfare Science Centre was established in 1997 by the University of Melbourne as a collaborative centre for research, teaching and training in animal welfare, with Monash University and the Department of Primary Industries (Victoria).

The Centre’s research and teaching capacity is considerable, with scientific expertise and experience in the key disciplines of animal behaviour, psychology, stress physiology and veterinary medicine. There are currently 13 scientists, 14 post-graduate students and 13 support staff operating within the Centre across the partner organisations.

There are also substantial specialised research and teaching facilities associated with the three partner organisations that are utilised by the scientific personnel working within the Centre. These facilities include research and housing facilities for farm, companion and laboratory animals, endocrine laboratories, multimedia publication laboratories and classroom and seminar facilities for teaching and training.

The Centre also has a formal collaborative agreement with the Department of Animal Science at The Ohio State University (OSU). As part of this agreement, the Centre provides and delivers animal welfare teaching modules into course curricula at OSU, assists in the establishment and delivery of training programs on animal handling and welfare for the livestock industries in the US and partners OSU in collaborative animal welfare research.

The Centre was established to provide a focus and direction for the partner organisations’ academic and research resources in animal welfare.

**The specific aims of the Centre are as follows:**

To conduct:

- Strategic animal welfare research to resolve major animal welfare issues and student training
- Targeted industry, public and tertiary education designed to improve animal welfare and productivity and to assure local and international consumers, the public and Governments that the welfare standards for Australian animals are underpinned by sound and well-accepted science.
In order to achieve these aims, the Centre conducts research and education in 4 program areas:

1. Welfare methodology
2. Housing and Husbandry effects on animal welfare
3. Attitudes to animals and animal welfare, and farmer, consumer and community behaviour
4. Tertiary and post-graduate education and training

These programs are followed to achieve the Centre’s targeted outputs:

- Develop scientifically defensible welfare methodology.
- Use scientifically defensible methodology to establish, amend or validate animal welfare standards and practices.
- Develop and support industry education and training strategies and provide scientific advice to support the modification of codes of practice and the development of quality assurance programs to introduce scientifically defensible welfare standards in the animal industries.
- Understand public and consumer attitudes to animal welfare to assist Governments and industry in
  - developing animal welfare policy
  - assuring local and international consumers, public and other governments of the sound welfare standards for Australian domestic animals.
- Ensure tertiary students entering the animal industries are better prepared to provide sound, science-based advice on animal welfare practices to industry, interest groups and the public.
- Provide high quality postgraduate and postdoctoral training for the next generation of researchers and teachers in animal welfare science.

**Our Vision**

“Animal welfare and its constant improvement are societal and cultural norms”

**Our Mission**

“To contribute to improved animal welfare as a world leading provider of expert information, advice and education underpinned by rigorous research”
Animal Companions for Life

The aim of today’s program is to highlight current companion animal research being undertaken at the Centre and Identify priority areas for future research.

The day will commence with presentations which will focus on research being conducted on animals in a shelter environment and will then move on to address current research which is examining welfare issues surrounding companion animals in the home and paddock.

Later in the day participants will be given the chance to provide feedback on current research and to give their suggestions on priority areas for future companion animal research.

This event will be an important contributor to our companion animal research planning for 2009—2010.

Program

9.15 am  Registration and coffee, morning tea
10.00 – 10.10  Paul Hemsworth  Welcome and orientation.
10.10 - 10.30  Pauleen Bennett  Historical and current state of companion animal research within the AWSC
10.30 - 10.45  Linda Marston  Overview of shelter research program – dogs
10.45 – 11.00  Linda Marston  Overview of shelter research program - cats
11.00 – 11.15  Sally Haynes  Cat management during 8 day quarantine period
11.15 – 11.30  Neva VanderKuyt  "Who’s for cats” campaign
11.30 - 11.45  Kate Mornement  Shelter dog assessment
11.45 – 12.00  Mia Cobb  Enrichment for kennelled dogs
12.00 – 12.15  Keven Kerswell  Self-reported comprehension ratings of dog behaviour by puppy owners
12.15 – 1.15  Lunch and poster presentations from fourth year students
1.15 – 1.30  Grahame Coleman  Horse welfare
1.30 – 1.45  Vanessa Rohlf  Human factors in dog obesity
1.45 – 2.00  Jacqui Ley  Dog personality
2.00 – 2.15  Jacqui Ley  Characteristics of successful human – dog relationships
2.15 – 2.30  Tammie King  Australia’s ideal dog
2.30 – 2.45  Pauleen Bennett  Summary and invitation to submit suggestions for future project areas.
2.45 – 3.30  Afternoon tea
3.30 – 4.30  Grahame Coleman  Discussion of issues raised by participants.

Where to from here?
Historical and current companion animal research within the Animal Welfare Science Centre

Pauleen C. Bennett, Animal Welfare Science Centre.

Senior Lecturer in Psychology, School of Psychology, Psychiatry & Psychological Medicine, Monash University. Leader Anthrozoology Research Group (ARG).

Companion animals face unique welfare challenges because of their position in society. Unlike other domesticated animals they live mostly in the care of individual humans who may or may not be well informed about their care requirements.

Additionally, they are often expected to fulfil human relationship needs, which are complex, multidimensional highly variable and sometimes unstable. Some of the welfare issues facing companion animals reflect disorders of excess, whereby owners lavish attention on their animals in inappropriate ways. Many others arise because of inappropriate selection, training and management decisions on the part of animal carers, which may result in neglect, abandonment or mistreatment.

Because of the context in which companion animals live, their welfare can only be effectively studied in a multidisciplinary research environment, where knowledge of animal behaviour and welfare needs is supported by knowledge of human behaviour and psychology. The Animal Welfare Science Centre is uniquely positioned to meet this need and has, over the past decade, conducted numerous companion animal welfare studies.

Together, these are designed to ensure that all of our animal companions enjoy good welfare throughout long, healthy and happy lives. The program today is designed to share the results of these studies with interested members of the community.

Equally importantly, because the welfare of our animal friends depends so much on decisions made by humans, the scientists from the AWSC are seeking community involvement in planning projects for the future. By the end of the day all participants should have a clearer idea of where we’ve come from, what we are trying to achieve, where we are now and the direction in which we should be heading.
Shelter Dog Research.

Linda Marston, Animal Welfare Science Centre - ARG.

Research Fellow, School of Psychology, Psychiatry & Psychological Medicine, Monash University.

Large numbers of dogs are rehomed by animal welfare shelters each year and existing literature suggests that nearly a quarter of them will be returned, with the majority returned soon after adoption. The future of returned animals is uncertain, as they are often viewed as problematic and hard to place.

A study was undertaken to determine the factors that contribute to such returns, with a view to reducing this statistic. Baseline data were collected for a 12-month period from three Melbourne shelters. A subsequent survey of people who had recently adopted a dog then identified the reasons that dogs were relinquished. This study established that behavioural problems, by themselves, do not determine which dogs are retained or returned but that factors, such as the owner’s attachment to the dog, may play a key role in retention. Notably, many of the behaviour problems reported involved separation-related issues, suggesting that the adopted dogs may have formed weak or insecure attachments with their owner. In human adoptions the formation of secure and robust attachment relationships is dependent upon carer interaction.

To determine if this applied to dogs, an experiment was conducted which evaluated how the interaction of an unknown person with a shelter dog affected canine attachment. This experiment used the Strange Situation Test.

Gentle physical interaction resulted in significant increases in positive measures of attachment. Attachment relationships are reciprocal in nature, therefore an increase in attachment in one member of the dyad should result in increased attachment in the other i.e. increasing a dog’s attachment to his or her owner should also increase the owner’s attachment to their dog. The final phase of this research entailed monitoring the effect of providing training for one month (4 weekly sessions) to new owners soon after adopting their dog.

The training incorporated obedience, targeted at the behavioural issues identified as problematic in previous stages of the research as well as basic obedience, and the provision of gentle positive physical interaction to foster the dog’s attachment.

Comparing the results of the training group with a control group revealed that owner attachment and interaction with the dog was greater, the perceived cost of ownership and the incidence of reported behaviour issues were lower in the training group compared to the control group.

Shelter statistics were monitored for one year at a shelter that implemented the program long-term and the results indicated increased retention. Implementing the post-adoptive program within a shelter environment has proven feasible and improved adoptive success. Avenues for future research in the shelter environment are considered.
Shelter cat research.

Linda Marston, Animal Welfare Science Centre - ARG.
Research Fellow, School of Psychology, Psychiatry & Psychological Medicine, Monash University.

While the number of pet cats is declining in Australia and there has been much public education regarding desexing, there has been little reduction in the number of cats admitted to and euthanased by welfare shelters.

Existing data suggests that almost one quarter (22%) of the Victorian public feeds cats that they do not own, a phenomenon known as semi-ownership. It is likely that semi-owned cats, being sexually entire and relatively well fed may contribute significantly to the numbers of unwanted cats in our society and to the high euthanasia rate. However, the relative contributions of the owned (or once owned cat population), the semi-owned and the feral population to shelter admissions is unknown, yet this information is critical to the development of effective and targeted strategies to reduce admission/euthanasia levels.

A recent prospective study tracked 25,810 cat admissions to a number of Melbourne shelters and collected variables considered likely to indicate the source of the cat including: body condition, sociability, the presence of injuries, obvious signs of disease and the number of cats presented per admission. This study identified that the majority (78.5%) of admissions were strays. While the majority (72.8%) of cats displayed an optimal body condition, colony cats were typically thinner, displayed more injuries and poorer health. Sadly kittens formed over half of all admissions. Almost two-thirds (63%) of cats admitted to shelters were euthanased and approximately 60% of kittens euthanased. Whilst many kittens were euthanased because they were too young to be fostered or feral, 38.8% of the euthanased kittens were sociable enough to rehome.

The low level of unsocialised cats observed in this sample indicates that shelter cats do not come primarily from the feral population. The relatively large proportion of semi-social cats admitted provides circumstantial evidence that semi-owned cats contribute significantly to shelter admissions.

A continuation of this study is currently underway investigating what happened to the cats that were adopted. The current project will describe why the people chose to adopt from a shelter, why they picked a particular cat, problems experienced post-adoption and quantify how many cats are retained post-adoption.
The effects of housing in a shelter environment on the welfare of the domestic cat.

Sally Haynes, Animal Welfare Science Centre.
Honours Student, Department of Agriculture & Food Systems, The University of Melbourne.

Animal shelters play a critical role in providing temporary care for surrendered, stray and rescued cats before they are reunited with their owners, re-homed or humanely destroyed. On entry to a Victorian shelter, cats must be individually housed in quarantine cages for a minimum of 8 days.

Cats in a shelter environment are subjected to relocation stress, a sudden change in available space, close olfactory and visual contact with other cats, noise, exposure to dogs, irregular handling and feeding by unfamiliar people and a lack of petting. These factors can contribute to the unpredictability of the environment and may result in poor welfare. A previous observational study of 112 cats in a Victorian shelter examined the temporal changes in posture and behaviour that are indicative of adaptation. Cats showed signs of adaptation during days 6-8 of the quarantine period, displaying significantly increased activity levels as well as significantly more bouts of feeding and care soliciting behaviours (e.g. meowing, purring, allorubbing and paw kneading).

In addition, entire cats were significantly more active than de-sexed animals and tended to display more comfort behaviours (e.g. grooming, scratching, yawning and stretching). It is possible that entire cats are more likely to be free-roaming, stray animals and are more capable of adapting to the sudden change in environment associated with confinement in a shelter.

The main aim of the current study was to determine the effects of hide provision and regular handling on the behavioural and physiological responses of quarantined shelter cats. The study examined two main effects: hide provision (2 levels, present or absent) and regular petting (2 levels, present or absent) in a 2x2 factorial design. 80 de-sexed (neutered males and spayed females) domestic cats were randomly allocated to one of four treatments: 1) hide and petting; 2) hide and no petting; 3) no hide and petting; or 4) no hide and no petting. The hide consisted of a standard sized 3-sided cardboard box and petting took place in a standard manner on days 2-6. Observations of posture and behaviour were made for 5s every 15 mins for 3 hours on days 2-7 while a human approach test was conducted on day 7. Urine was collected non-invasively on days 3 and 7 for the purpose of measuring cortisol levels.

While reducing the stress experienced by cats is likely to improve their welfare, it may also increase their tractability, improve individual immunity, decrease disease outbreaks and thus increase their potential for adoption. A reduction in euthanasia rates may also assist shelter staff retention.
“Who's for cats” campaign.

Neva VanderKuyt

Community Education Coordinator, Bureau of Animal Welfare, Department of Primary Industries, Victoria.

Research shows that each year in Victoria, around 50,000 cats are impounded, and 35,000 of these have to be euthanased. The cat overpopulation problem is due to a number of factors, however a survey conducted by Monash University has found that a major contributing factor to this problem is people feeding unowned cats but not taking full ownership or responsibility for them (e.g. they don’t desex or identify them, or keep them on their property). Feeding unowned cats helps regenerate cat colonies by keeping cats strong enough to reproduce.

Research shows that people feed unowned cats because they feel sorry for them. They think they are helping these cats, and don't realise they're doing anything wrong. These people need to be informed about the consequences of their actions and the impact that it is having on the overall unowned cat population.

In order to address this problem, a number of organisations in Victoria have come together to pool resources and implement a media campaign. The "Who's for cats?” campaign involves TV, radio, print advertisements and other education activities. Participating organisations are: the Animal Welfare Science Centre, Australian Veterinary Association, Cat Protection Society, Department of Primary Industries, Lort Smith Animal Hospital, Monash University, Municipal Association of Victoria, Pet Industry Association of Australia, RSPCA, The Lost Dogs’ Home, and Victorian Animal Aid.

This presentation will give an overview of the campaign, which was launched in November 2007, and an update on progress to date.

Website: www.whosforcats.com.au

Kate Mornement, Animal Welfare Science Centre - ARG.
PhD student, School of Psychology, Psychiatry & Psychological Medicine, Monash University.

Despite the popularity of dog ownership in Australia, many companion dogs enter the welfare shelter system either as stays or having been surrendered by their owner. These dogs are typically screened for their suitability as a companion by way of a behavioural assessment or temperament test.

The results of these tests determine whether a dog is considered suitable for adoption or whether it will be euthanased. It is crucial therefore, that such tests are scientifically valid, as decisions based on invalid assessments of behaviour pose a welfare risk to dogs in the shelter system (if suitable dogs are euthanased) and to the adoptive public (if unsuitable dogs are adopted out into the community).

A comprehensive review of current shelter assessment protocols was conducted. This involved a literature review; observations of over 50 shelter dog assessments conducted at 11 animal shelters across six states of Australia; and interviews with 26 shelter staff responsible for assessing dogs. Based on the results of the review, the Behavioural Assessment for Re-homing K9’s (B.A.R.K.) protocol was developed, in conjunction with an advisory committee comprised of various experts on canine behaviour.

The B.A.R.K. protocol has been implemented into a Victorian animal shelter for validation. Preliminary results of the validation study will be presented and the implications of the results for shelters will be discussed.
Kennel enrichment: catalyst or conundrum?

Mia Cobb, Animal Welfare Science Centre - ARG.
PhD student, School of Psychology, Psychiatry & Psychological Medicine, Monash University.

Kennel facilities are generally built with a focus to maximise capacity and for ease of maintaining hygiene, often not providing the best environment for a dog’s wellbeing.

Research in the last fifteen years has provided evidence that the use of enrichment for dogs housed in kennels can improve their welfare. This has been met with various industry responses, ranging from no change in practice to enthusiastic implementation of enrichment programs.

The current Victorian legislative requirements in the area of canine behavioural wellbeing are vague, highlighting the importance of further research that provides information relevant to industry applications of enrichment.

This research project is investigating the behavioural and physiological effects of a structured enrichment program on young dogs returning to the kennel environment after a twelve month puppy raising program.

Dogs have been randomly allocated to either a control group, in which no enrichment is provided, or a treatment group, in which the dogs take part in a structured enrichment program with activities that take up at least sixty minutes of every day. Salivary cortisol, salivary IgA and blood Neutrophil:Lymphocyte ratios between groups will be compared along with behavioural differences between groups.

Data are also being collected in relation to how dogs make use of enrichment items and opportunities.
Dogs show a range of behaviors that reflect their emotional state. It is important that dog owners recognise these behaviours to accurately assess their dog's emotional state. We examined dog-owners' self-reported comprehension (SRC) of their dog's emotional state.

Eighty-nine participants attending Puppy Socialization Classes at local veterinary clinics in the Melbourne Metropolitan area, Victoria, Australia, rated their comprehension of their dog's emotional states (Happy, Sad, Anxious, Angry, Friendly Greeting and Anxious Greeting) and listed the behaviors they used to judge the emotional state of their dog. In most cases (Anxious Greeting being the only exception), the owners' perceived comprehension of their dog's emotional state, was not closely related to the number of behaviors they reported.

The reported behaviors were mostly restricted to vocalizations and gross body movements. There was also no relationship to dog morphology. There were relationships between SRC and the age and gender of the participant, and previous puppy ownership.

It was concluded that most dog owners report having a good understanding of emotional state of their dogs, when they seem to have low appreciation of the signals that dogs send in the earlier stages of emotional arousal.

An approach to lowering dog owner's perception of their comprehension of dog behavior, which may increase their willingness to seek education on dog behavior, and increase the efficacy of the education, is suggested.

Lauren Hemsworth, Animal Welfare Science Centre.

PhD student, School of Psychology, Psychiatry & Psychological Medicine, Monash University.

The welfare of horses, particularly those used for recreation, has become an increasingly important issue. Since 1997, the Royal Society for the Prevention of Cruelty to Animals (RSPCA) in Victoria has investigated more than 1200 cases of horse welfare per year, second only in number to dog welfare investigations (RSPCA Annual Report, 2001/2002). A considerable proportion of the welfare problems that occur are believed to involve horses that are used primarily for non-competitive recreational purposes. While little is known about the extent and seriousness of welfare problems in horses used in such a capacity, a view shared widely among animal welfare groups, horse owners and equine welfare researchers is that horse owners are primarily responsible for their horse’s welfare.

The research project, consisting of two parts aims to (a). randomly sample inner and outer suburban areas and regional areas of Victoria to estimate the recreational horse population and collect details on horse ownership, and (b). to examine the relationship between the extent of welfare problems in horses and owner characteristics and circumstances, as well as housing and husbandry standards. Horse owners/primary carers are primarily responsible for their horse’s welfare, therefore owners/primary carers’ attitudes towards their horses, horse ownership and interactions, their characteristics, demographics and the management and husbandry techniques they implement all have the potential to impact on their horse’s welfare.

Further research on the impact of human-horse interactions on horse welfare is essential, as information on owner knowledge, attitudes and demographic and horse management characteristics can be utilized in developing and implementing education programs and government policy and/or legislation aimed at preventing horse welfare problems. Owner characteristics as well as circumstances surrounding horse ownership need to be understood in order to develop targeted educational programs that address the main owner factors associated with horse welfare problems. Furthermore, an understanding of the attitudes to horse identification and the implications of horse identification may lead to the introduction of compulsory horse identification/registration on a state-wide basis.
**Human factors in dog obesity.**

**Vanessa Rohlf,** Animal Welfare Science Centre - ARG.

PhD student, School of Psychology, Psychiatry & Psychological Medicine, Monash University.

Toukhsati, S.*, Coleman, G.* and Bennett, P.* *Animal Welfare Science Centre, School of Psychology, Psychiatry & Psychological Medicine, Monash University.

Dog obesity is a common nutritional disorder affecting up to 40 percent of the pet dog population in Australia with similar rates in other developed nations. While obesity can, theoretically, be treated through dietary restriction and increased exercise, owner compliance with treatment is poor.

Ongoing behavioural change is infrequent and recidivism is high with significant welfare implications for the canines in question. Underpinning effective treatment for this disorder is a clear understanding of those factors which determine relevant owner behaviours. The Theory of Planned Behaviour can be used to understand factors contributing to human behaviour.

The aim of this paper is to describe research informed by this theory, which examined relationships between owners’ specific attitudes, normative beliefs and perceptions of control, feeding and exercise behaviours towards their dogs, and the Body Condition Scores (BCSs) of dogs. A sample of 182 dog and owner dyads was recruited. BCSs were independently assessed by the researcher.

Owners completed a questionnaire measuring relevant feeding and exercise beliefs and behaviours. Significant correlations were found between many psychological variables and BCSs, and between psychological variables and specific owner behaviours. For example, low levels of intentions to feed appropriately were related to higher BCSs.

Owners’ intentions to feed and exercise their dogs appropriately were best predicted by the degree of control they believed they had over these behaviours. Careful consideration of the specific variables identified will permit the development of more effective interventions.
Describing and measuring dog personality dimensions

Jacqui Ley, Animal Welfare Science Centre - ARG.
PhD Student, School of Psychology, Psychiatry & Psychological Medicine, Monash University. Resident in Veterinary Behavioural Medicine.

In humans, the construct of personality refers to those stable and persistent thoughts, feelings and behavioural tendencies that are characteristic of an adult individual. Although thoughts and feelings are currently impossible to identify in other species, it has become increasingly acceptable for behavioural scientists to acknowledge the existence of animal personality, and to use behavioural individual differences as an indirect measure of underlying personality structures.

Unfortunately, little information is available regarding the dimensions of personality in other species. In this project a questionnaire and a model for describing canine personality were developed using personality trait theory, specifically the psycholexical hypothesis, and utilizing the methodology used in the development of the Big Five Model (BFM) of human personality.

The project resulted in the development of a twenty six item questionnaire, the Monash Canine Personality Questionnaire- Revised (MCPQ-R). This instrument measures canine personality along five dimensions - Extraversion, Motivation, Training Focus, Amicability and Neuroticism. Initial validity and reliability studies support the MCPQ-R as a valid and reliable test for evaluating differences in canine personality.

It has several practical applications, such as helping potential dog owners select suitable dogs for their circumstances, rehoming shelter dogs and selecting dogs for specific roles such as guiding or guarding. Further research is planned using the MCPQ-R to understand the role of canine personality in forming and maintaining successful bonds between dogs and humans.
Characteristics of successful human/dog relationships

Jacqui Ley and Pauleen Bennett*, Animal Welfare Science Centre - ARG.

PhD Student, School of Psychology, Psychiatry & Psychological Medicine, Monash University. Resident in Veterinary Behavioural Medicine.

* Senior Lecturer in Psychology, School of Psychology, Psychiatry & Psychological Medicine, Monash University.

Dog owners are often advised to purchase certain breeds or types of dogs believed to have characteristics that will make them suitable companions. Very little research, however, has examined exactly what canine characteristics are important in determining the success of the human/dog relationship, what dogs display these characteristics and also, whether different types of owners are more or less satisfied with different types of dogs.

In one of our studies we found that young adults actually know very little about different breeds of dogs, although they do have quite strong beliefs about some breeds. Whether these are accurate or not is unknown since, although information about dog breeds is available from many sources, the accuracy and validity of this information has not been examined in any detail.

In this study we plan to use some of the instruments we have developed over recent years to determine how satisfied dog owners are with different kinds of dogs.

The aim is to use the internet to collect and collate, from a really large number of dog owners, information about the relationship they have with their dog and how satisfied they are with this relationship, information about their own characteristics, and information about the dog’s personality and behaviour. This will allow us to describe different types of owners and the personality and behavioural profiles of those dogs that make the best companions for these different owner types.

At the end of the study we should have a much clearer understanding of how owner and dog characteristics interact to influence the strength of the dog-owner relationship and owner satisfaction.

We also hope to be able to produce a comprehensive and up-to-date description of different dog breeds and types, based on the experiences of a large number of Australian dog owners. This should help breeders develop appropriate breeding goals and also have clear benefits for both the dog owning public and Australian dogs.
Australia’s ideal dog.

Tammie King, Animal Welfare Science Centre - ARG.

PhD student, School of Psychology, Psychiatry & Psychological Medicine, Monash University.

The aim in this study is to develop a standardised behaviour assessment protocol that can be used by welfare shelters, dog trainers, behaviourists, breeders and other various dog-related organisations to accurately describe the behavioural disposition of adult companion dogs in Australia.

Currently a standardised behavioural assessment does not exist for adult dogs. Such a test would be of great value for dog-related organisations which need to accurately and reliably evaluate the behavioural disposition of adult companion dogs to ensure compatibility with a new owner, determine a dog’s ability to cope in an urban environment or to determine the success of a behavioural training program.

The initial component of this study involved identifying behavioural characteristics important to the Australian public, so as to ensure these are included in the final assessment protocol. To determine what constitutes the “ideal dog” in Australia, 877 participants were surveyed.

A number of important behavioural and physical characteristics were identified and will be discussed in the presentation. This project has the potential to improve dog welfare by identifying dogs that are best suited to owners’ requirements and lifestyles. This will enable breeders and trainers to modify their programs as required.

Breeding from animals able to tolerate the stresses and demands of today’s lifestyle, training animals to behave appropriately, and educating pet dog owners about the characteristics of different dogs will reduce the incidence of problem behaviours, such as separation anxiety and destructiveness. It will also increase owner satisfaction and reduce the number of dogs relinquished to shelters. In addition, dog trainers and behaviourists could use the assessment to determine the effectiveness of various strategies used to remedy various behavioural problems.
An electronic version of this publication is available from:

www.animalwelfare.net.au

For more information phone 03 8344 8933