The State Hospital



ANIMALS AS THERAPY

Guidance for establishing Animal Therapy in a Healthcare setting

"An account of practical, physical, emotional and behavioural features"



Contents

	About Us
	About Our Patients
01	Introduction
02	The Centre
03	Where do we get our Animals from?
04	Therapeutic Outcomes
05	Evidence
06	Our Observations
07	Facilities
08	Animal Care
	Articles held in the Unit
	Pet Animal Policy

About Us

THE STATE HOSPITAL PART OF THE NHS IN SCOTLAND



"We look forward to embracing the challenges we face and pay tribute to our staff and partners who are helping us to achieve our goals." The State Hospital is one of four high secure hospitals in the UK providing a national service for patients from Scotland and Northern Ireland. Our purpose is both to provide care and treatment of the highest standards and to ensure public safety.

Employing around 650 staff, we provide assessment, treatment and care in conditions of special security for up to 140 patients with mental disorder who, because of their dangerous, violent or criminal propensities, cannot be cared for in any other setting.

The Hospital is located in Lanarkshire in central Scotland, midway between the cities of Edinburgh and Glasgow.

We place great importance on involving others in the work of the Hospital and improving openness and accountability.



About Our Patients



"Concentrating care to each patient on an individual basis is of paramount importance."



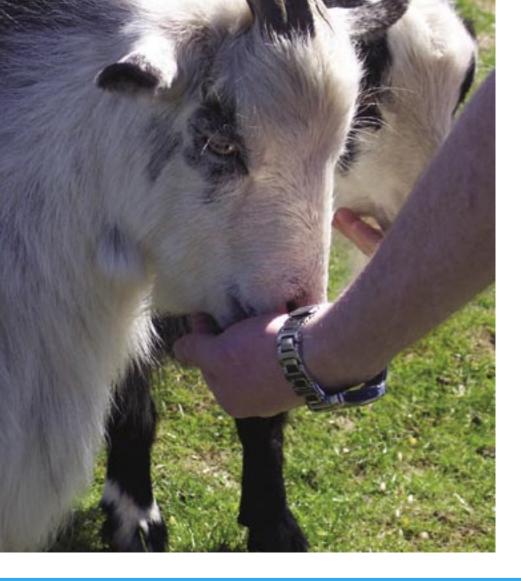
Patients are admitted to the Hospital under the requirements of the Mental Health (Care and Treatment) (Scotland) Act 2003 and related legislation.

- The majority of patients have a primary diagnosis of schizophrenia, a quarter have another primary diagnosis, and a small number have multiple diagnoses.
- Patients spend on average around seven years in the State Hospital, ranging from around four weeks to nearly 40 years.
- Patients can be admitted from and discharged to other NHS Hospitals, prisons, courts and the community.



Each patient is cared for by a multi-disciplinary Clinical Team.

Clinical effectiveness remains a high priority for the Hospital, and we are committed to ongoing audit of clinical practice and recognise the importance of research to advance and promote clinical and evidence-based practice.



"The gardens offer a wide range of activities from horticulture to pet handling of rabbits and guinea pigs to kune kune pigs, goats and hens. You are encouraged to handle and feed, leaving a sense of wellbeing."

PATIENT QUOTE

"Bonding with animals is often much easier than getting people to like and trust you, so animals-astherapy is a great first step in the rehabilitation process."

> AILEEN GALT, Rehabilitation Instructor

Holly and Noel (Pygmy Goats)

01 Introduction

The Garden and Animal Therapy Centre continues to be popular with patients, staff and visitors. On average, the Centre receives around 120 patients each week, a small number of external visitors and numerous phone calls requesting information on the many and varying aspects of our work. There are many benefits of human-animal interaction in the field of mental health, and as a result many of the enquiries we receive relate to our work with animals.

Animal Assisted Therapy is the term normally used when a clinician provides therapy with the assistance of an animal. This is usually provided in addition to other therapies. One of the earliest recorded accounts of Animal Assisted Therapy was that of Boris Levinson in 1984 when a child who had been making no progress in psychotherapy incidentally met Levinson's dog, and the meeting marked an upturn in the child's progress towards greater wellbeing. The dog was then used as an aid to achieving goals (Levinson 1984). Here at the State Hospital we use the term 'Animals as Therapy'. This is because, at large, the Centre accommodates groups at any one time although we do undertake some goal-directed Animal Assisted Therapy with individuals. Whether therapy is delivered to individuals or groups of patients, the benefits that animals bring are unquestionably therapeutic for many patients. We consider that in having animals in the Unit, we provide a therapeutic environment that can facilitate therapeutic outcomes, without actually applying "therapy".

the benefits that animals bring are unquestionably therapeutic for many patients



Patient Accommodation

In the absence of national guidance for keeping animals in long stay hospitals in the UK, a great deal of research has been going on in Animal Assisted Therapy in recent years, and more and more evidence of its benefits is being gathered worldwide. The great difficulty in gathering this evidence within a mental health population is:

- The relatively small numbers of participants it is possible to recruit, either because of unwillingness to take part, or simply because patients are not well enough to want to do this.
- A lack of funding and support for what is considered a "fuzzy" area.

In the State Hospital we have been fortunate to be able to carry out two research projects in this field. Although both still on the small side, they have demonstrated definite plus points.

In the hope that it will help others, we are happy to share our experience, in particular: information on how our unit was founded, difficulties encountered, the benefits witnessed, the outcomes of our research projects, where we were and where we are now.

The Animal Therapy Centre was first introduced within the Hospital in the mid 1990s as an addition to the Gardens Centre which provided patients with the opportunity to learn about plants, how to sow them, grow them and care for them. A member of staff had gathered a great deal of information about animals benefiting patients with mental health problems, and as a result of this enthusiasm animals were introduced. This individual had already helped to set up a pigeon loft for patients within the Learning Disability ward where they were able to care for the birds initially. This led to racing pigeons through a local Pigeon Club. Even patients with the most enduring learning disability were able to handle the birds gently. Their sense of achievement and wellbeing in successfully rearing young birds was remarkable and notably motivational. Membership of the local club made patients feel "accepted" and part of the local community.



Two Indian Runner Ducks



"It's good to see the animals safe and have animals as pets; it gives you something to look forward to as they trust you." PATIENT QUOTE

"You can literally see the change in the patients' demeanour when they come through the door. And when we're out with the animals, it's simply great to see the enjoyment that patients get. I could talk all day about the therapeutic benefits that animals bring."

Senior Staff Nurse

Koi Carp

02 The Centre

The Centre is part of the Nursing Directorate. Patients are referred to the Centre via their Clinical Teams, subject to a robust referral process including risk assessment. Patients' preferences are noted, and they can switch easily between animals and gardens.

Approximately 15 patients attend normal sessions, morning and afternoon, with four or five staff in attendance. Generally the ratio is five patients to one member of staff. Gardening activities are seasonal, with different levels of activity available throughout the year. The animal facility is much the same all year round, although there are seasonal focuses, like Spring matings and the birth of young, and Winter defrosting of water containers.

Patient assessments are made through staff observation and discussion with reports being fed back to the Clinical Team.

There are no specific assessments for patients attending the animal therapy area, although there are clear differences in what can be measured in this setting. For example, a measure of empathy is relevant to the care of animals, but not to the care of plants.

The Centre runs a weekly session for newly admitted patients. During these sessions their reactions to and interactions with the animals are closely monitored. This is helpful in the event of a referral to the Centre being made.

reactions to and interactions with the animals are closely monitored



Any patient who is immune-deficient is allowed access to the animals but is discouraged from handling them, although each case is assessed individually. For example, if the emotional wellbeing of the patient appears to be strongly enhanced by stroking one of the animals, yet he is immune-deficient, this can take place with docile animals under close supervision.

Every animal, and animal species, is risk assessed. On a species level, this includes awareness of known zoonotic diseases and infections. Close collaboration with the Hospital's Health and Safety representatives and the Infection Control Nurse keeps everything in order. The Centre also works in close association with the local veterinary practice and a visit from the vet takes place four times a year for assessment of the animals' health, in addition to any emergency visits.

Each resident animal is initially monitored closely, and bites, scratches, or instances of aggressive behaviour are noted. If a patient is accidentally bitten or scratched, this is at once reported to the patient's ward, where appropriate action will be taken, such as organising tetanus boosters. Any animal that attacks frequently is rehomed or put to sleep. This has happened in one case involving rats, which is described later. Bites and scratches are, however, extremely rare. They can usually be avoided by keen observation, and instruction on the individual characteristics and behavioural patterns of each animal. For example, our two pigs have a great love of apples. They will sit on command, and accept a piece of apple. Many people feel afraid that their fingers are going to disappear between the eager teeth when they present a piece of apple, but given the correct technique, they can learn to trust. If they do not trust, and withdraw their hand, they are more likely to get bitten as the pig dives forward for the apple.

If they trust and allow the animal to sense where their hand is and that it will remain steady, there is little chance of getting bitten. This is a difficult message to get across, but experience teaches us that it works.

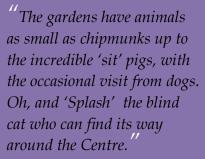
While most experts in the field of Animal Assisted Therapy stress the importance of only taking in well-behaved animals, we have found that this is not necessarily true for our situation, with the exception of visiting animals such as dogs.

There is a rationale behind this:

- Firstly, an animal that has been abused and is aggressive can learn to trust.
- The person that the animal learns to trust can gain a great deal of fulfilment and sense of self-worth from the effort required to change this situation.
- Many of our patients have come along a parallel line with these animals: they have been abused, they have suffered and learned mistrust, they have been dealt with aggressively and have subsequently used aggression, and when they observe how an animal's behaviour can be changed dramatically using positive reinforcement, they can relate this to how their own behaviour can change.



Terrapin



PATIENT QUOTE

"Working with plants and animals constitutes a rich, rewarding experience for everyone."

Staff Nurse

Splash (Cat)

03 Where do we get our Animals from?

They come from various sources: some are donated, some are purchased, some bred on the premises and others rescued. Initially we received several enquiries about taking in animals from the local veterinary practice. This was a very good way of obtaining animals since their suitability as pets had already been assessed, and they were healthy.

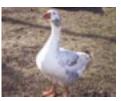
Occasionally we have enquiries from staff whose children may have lost interest in their pets for one reason or another, and they feel their pets would have a better life in the Hospital. If we have room for them and resources to look after them, we usually take them.

We bought the hens. A difference of opinion among staff exists around the hens. Some feel that when the hens' laying capabilities reduce, they should be replaced, because part of the enjoyment of keeping hens is in gathering the eggs. Others feel that they should have a home for life. To us however, it seems inappropriate to dispose of animals when their (commercial) usefulness has expired. It would be a very poor example for people with low selfesteem. In finding a middle ground we bought Black Rock hens as these hens have a lower laying capacity but keep on laying for many years. These hens are also fairly hardy and can get through our Scottish winters without too much bother.

The two kune kune pigs were purchased from a specialist breeder in Yorkshire, and this breed was chosen because of their renowned friendliness towards humans and their trainability.



the two kune kune pigs were chosen because of their renowned friendliness towards humans and trainability



Nelson (Gander)

Our blind cat was found as a kitten on a rubbish dump and taken to the vet who diagnosed cat flu. One of his eyes had to be removed, and the other is sightless. He lived for his first five years in a rescue centre, the owner of which subsequently agreed to bring cats to visit the Centre once a month. One of them was our cat 'Splash' who gets plenty of stroking and playtimes. He is particularly suited to the environment because of his blindness – he cannot hunt (safe with rabbits, guinea pigs and birds) or climb fences, and therefore does not wander too far.

Some of our other animals were also disabled. In the past we had a three-legged rabbit called 'Tripod' who was a great favourite with patients sneaking her extra treats. We also had a guinea pig named 'One Eye' was also much loved and given special attention – 'One Eye' had an eye missing from birth.

Currently we have:

3 outdoor rabbits	4 indoor rabbits
4 guinea pigs	2 kune kune sows
2 pygmy goats	A pair of geese and a gosling
15 ducks	20 hens
10 cockatiels	2 borrowed lambs
A cat	A parrot
12 stocked fish tanks	Three indoor ponds with koi carp
2 terrapins	1 chipmunk
3 visiting dogs	

Learning from Experience

The greatest obstacle to pets providing therapy is cultural attitudes. For example, we obtained two rats from a local pet shop. Unknown to us they were pregnant. As soon as they gave birth they defended their young strongly, and bit a couple of people. It was a mistake to take on pregnant rats who didn't yet know us. A number of the patients felt very attached to them but because of the biting we took the decision to rehome them.

Each animal is treated as an individual, we would not take on an animal that was known to bite, but sometimes the fact that it bites is not discovered until after it takes up residence.

Thelma and Louise (Kune Kune Sows)

A rat bite is unlikely to inflict a severe wound, while a rabbit can cause a good deal of damage with its hind legs if it is lifted against its will. Rabbits are considered favourably, while rats are thought of by many people as "dirty". The cultural influence is strong, and the trend among some staff and patients is to condemn the biting rat and give the scratching rabbit a second chance. Attitudes of staff can of course greatly influence the extent to which the Centre can be therapeutic.

As the Centre is home to both animals and plants there is sometimes a conflict of interest between what is considered necessary for the plants, such as pesticides, and the kind of environment the animals need. The two have to be kept separate from time to time.

We didn't always get feeding patterns right but more about this later.

Who looks after the animals at the weekends and holidays?

Ideally, round the clock care of the animals would be provided by patients, emphasising the responsibility involved in caring for animals and fostering this sense of dependency. However this is currently not possible as the Centre is only open Monday to Friday although this may change in the future. The animals are cared for by staff from other Centres who work at the weekend. This means always keeping in mind what is happening with the animals during the week so this information can be passed on, for example, do any animals need to be isolated, given medication or a special diet? To ensure that we remember everything we have a noticeboard in the main animal shed. On public holidays staff take turns to come in, usually on overtime.





"Sparked by the enthusiasm of staff, patients' lives have been normalised through a shared experience of common ownership of the large variety of animals within the Centre; we see them as important sources of social support that provide non-judgemental companionship. Patients' engagement with pets could well be the key that opens the door to engagement in other therapeutic programmes and must be considered as an important adjunct to a holistic approach to patient recovery of health and wellbeing. I am delighted to have contributed to the effort by introducing the patients to an elephant orphanage in Kenya.

Clinician Quote

Ducklings

04 Therapeutic Outcomes

We don't actually need to **do** anything to provide therapy.

Therapy can be in the form of looking, touching, hearing – anything that makes someone feel a little happier, a little prouder, more confident or motivated to do something like ask a question or smile. It does not have to be *directed* therapy, but it can be. Directed therapy means that we look for specific outcomes in a particular patient, and provide an opportunity for these outcomes to take place, monitoring to what extent the goals are achieved.

There are many benefits that can be experienced by patients participating in animal assisted activities or Animals as Therapy. Benefits such as:

- Access to fresh air.
- Exercise.
- Interacting with a different peer group.
- Group activities.
- A different environment.

These can be applied to a range of activities and are not specific to animal care. There are others which are specific, and some of these are listed below.

Ability to learn what animals need

Patients often already have some knowledge of the needs of animals such as dogs or cats, as they have experience of these as pets. However many of the animals we have in the Centre are unfamiliar to them, such as pigs, goats and hens. This gives patients the opportunity to learn about their specific requirements. Among other things this gives the opportunity to assess concentration and the ability to retain information.

Awareness of animals needs

Many patients experience difficulties with perception as a result of mental health problems. This impacts on their functioning and engagement in many activities.

there are many benefits that can be experienced by patients participating in animal assisted activities



Rabbit

It has been noted that while interacting with animals, patients demonstrate increased awareness of their environment. An example of this is the patient who constantly responded to unseen stimuli but appeared to have respite from his symptoms while handling animals and was able to discuss what he had been doing and had observed.

Problem solving skills

As with other activities patients can be assessed in their ability to problem solve, and they can also be assisted to develop these skills.

Ability to change former embedded attitudes

Individuals often have embedded attitudes regarding care and treatment of animals. During the process of caring for animals patients are often challenged regarding their views in relation to the training or feeding of animals. Challenging and assisting patients to consider alternative viewpoints and change practice can be made easier by the use of animals. For example, the skill of demonstrating the effectiveness of positive reinforcement can be transferred to other areas of life.

Desire to learn what animals need

The desire to learn is not the same as the ability to do so. The focus of the activity is a living breathing animal which is dependent on others for food and water, and this can often be the motivation for learning more about their care. The enthusiastic response of the animal, particularly the larger ones such as the pigs and the goats, can also encourage patients to learn more about their daily needs so that they can assume a degree of responsibility.

When engaged in looking after animals patients often demonstrate a caring attitude and a keenness to learn about the needs of the animals. This has been observed in patients who are known to us as being distant and hostile. They can show compassion and even tenderness towards animals that they have not shown, or struggle to show, to fellow human beings. Patients will at times talk about pets they been attached to and lost, and this often extends into wider aspects of loss they are experiencing/have experienced. Caring for a living animal appears to open avenues of discussion that would not be so easy otherwise. It opens the conversation to 'softer' topics. The emotions that young/sick/endearing animals engender are different to those elicited by engaging, for example, in woodcraft. This is not to decry the importance of these other valuable therapeutic activities, or to deny their benefits. It would simply appear that dealing with animals provokes different reactions.

Ability to empathise

It has been observed that patients are drawn towards animals with a disability, such as the blind cat, one-eyed guinea pig or three-legged rabbit. It is only a supposition but it is possible that they identify with the animals that struggle, and are different from the rest.

Ability to deal with aggressive thoughts and feelings

There are many anecdotes that illustrate the idea that working with animals assists patients in dealing with aggressive thoughts and feelings. For some patients who have a history of violence this has proven to be a useful coping mechanism. Several patients who attend present in a very different way when in the Centre compared to on the ward, with less evidence of confrontational behaviour. When asked they have mentioned that they feel calmer when with animals and feel as if the animals do not judge them, and also that it is rewarding to work with animals.

Others

Staff in the Centre feedback observations regarding any of these points to the patient's Clinical Team. They also pass on observations regarding mental state, observation of hallucinations and disordered thought processes together with relevant information regarding their physical condition.

Behaviour is generally directed by emotion. How we feel affects how we behave. The emotion - anger, happiness, pride etc causes us to behave in a particular way. Animals can change emotional reactions, and the way they do it appears to be to redirect focus. An example of this is a patient with a learning disability who was particularly fond of our two rats (not the biting ones). He took a rat from its cage and placed it on his shoulder, and walked proudly around the Centre every time he visited, before we began any activities. On one occasion we were outside working in the garden, when this patient had an argument with another patient. The result of the argument was that he threw a stone at the other patient, fortunately missing him. He was taken inside and counselled. On a subsequent occasion when an argument arose between this man and another patient, the altercation took place inside, while he had one of the rats on his shoulder. This time he didn't attack his opponent; he walked away, stroking the rat and talking to it, and no staff intervention was required.



Animals in the Farmyard

"It's good to watch the chickens pecking for food and grain."

PATIENT QUOTE

"I regularly bring my Border terrier into the Centre. The single most important change that I have seen with patients is how many spontaneously initiate conversations with me about the dog. This has enabled me to introduce topics important to the therapeutic process with patients in a more informal and collaborative manner, as rapport has been established by virtue of the connection we have through the dog."

Consultant Psychiatrist

05 Evidence

We know that man's relationship with animals has been going on for centuries, and there is evidence to suggest that wolves and people co-existed around 400,000 years ago (Katcher 1984).

Aeron Katcher, a professor of psychiatry in the United States who has published a substantial number of research papers on the health benefits of animals, believes that people evolved with a need to pay attention to animals for food, danger, warning of danger, help with hunting food and so on, and that this is why most people find it impossible not to pay attention to animals, even if they don't like them particularly.

The majority of research projects studying the effects of Animal Assisted Therapy have been small, but most indicate that this kind of therapy has great potential in the mental health field. In 1987 a psychiatric social worker in a forensic psychiatric hospital in the United States carried out a year-long study of the effects of Animal Assisted Therapy. A 50% reduction in medication for the Animal Assisted Therapy group of participants was recorded, compared with the group who did not receive Animal Assisted Therapy. On the ward where there were no pets, eight suicide attempts were recorded, and none on the ward with pets. Lower levels of violence were also recorded in the Animal Assisted Therapy group (Lee 1987).

a number of studies have shown increased social interaction in psychiatric patients during dog visits



Fudge (Border Terrier)

A number of studies have shown increased social interaction in psychiatric patients during dog visits. These have been treated with caution because it was thought that any gains might be due to the novelty factor. One study addressed this issue. Five long-stay psychiatric patients who showed reluctance to begin conversations, unable or unwilling to sustain a conversation, had motor retardation and lack of interest in their environment, took part in a study to assess the effects of Animal Assisted Therapy. Consistent baseline measures were taken over two weekly sessions, followed by 14 weekly sessions of a 90 minute visit from a dog and handler. Verbal and non-verbal behaviours increased during the dog visits, and this effect was sustained throughout the study (Hall & Malpass 2000).

A study supervised by Gloria Francis, Professor of Psychiatric Mental Health Nursing in Virginia Commonwealth University looked at the effects of AAT on elderly people with chronic mental illness. The study involved three separate homes. Animals with handlers visited one home, while the others received only human visitors. Pre and post tests on health self-concept, life satisfaction, psychological wellbeing, social competence and interest, personal neatness, psychosocial and mental function and depression were carried out. Those who interacted with the animals improved on six of the eight variables (not personal neatness or health self-concept) while those who had human visitors only, didn't improve (Odendaal 2002).

In 1989 a hospital Animal Assisted Therapy programme in the UK began by accident. A blind patient was admitted to an acute care ward accompanied by his guide dog, and the staff felt obliged to keep the dog on the unit while his owner underwent surgery. The atmosphere in the unit appeared to change. The dog became a focus of attention and seemed to relieve the pressures felt by staff and patients on a busy ward. Because of this, regular visits by dogs and guinea pigs were arranged, and it was observed that people seemed to interact more when the animals were there. Reporting on this, Fila described the animal sessions as a "shared experience". In 2000 the State Hospital undertook a study into the effectiveness of the presence of a dog in improving communication levels in long- term psychiatric male patients who were considered by their Clinical Teams to be uncommunicative, withdrawn or both. This was a small study involving 12 patients in three groups. Two groups were interviewed over eight sessions each lasting 15 minutes, with the dog present (four) or the dog absent (four) in a crossover design. The third group acted as control and were not interviewed. All three groups were assessed before and after the study by their key workers, using an Interpersonal Communication Rating Scale. Interviews were video-recorded and participants were rated on verbal and non-verbal variables, using tick box ratings, and an overall assessment of behaviour. Although results indicated no significant increase in communication levels, there were significantly fewer short responses to questions when the dog was there. Some participants appeared less tense, indicated by improved posture, more smiling, and in one case reduction - almost absence - of stereotypic movement.

At the International Conference on Human/Animal Interactions held in Glasgow in 2004, Bruce Headey of the University of Melbourne presented a paper on the relationship between pet ownership and health in Australia, China and Germany. This study involved 10,000 people in Germany and 1,500 in Australia. The Australian and German studies showed that :

- People who continuously own a pet are the healthiest group, with significantly fewer visits to their doctor.
- People who acquire a pet and who have previously not owned one for a major part of their lives are the second healthiest group.
- The least healthy group, with the greatest number of visits to the doctor, are those who have never owned a pet.

This suggests that people who have not had much to do with animals in the past can still benefit from them in the future. It also suggests that animals are helping health services to save money.

A list of recommended reading can be found at the back of this publication.



"It's great to learn how to care for the animals. Sharing their trust and being gentle can make your day. Seeing them content is rewarding and worthwhile."

PATIENT QUOTE

It is rewarding to observe patient interactions with animals large or small, and see the calming influence and the smile it brings to their faces.

Rehabilitation Instructor

Cockatiel

06 Our Observations

Observation is an important skill for all staff. The primary purpose of supportive observation and engagement is to maximise patient safety, minimise risk and to initiate and build supportive therapeutic relationships. Accurate clinical observations are the key to good patient care and fundamental to nursing practice.

(Names of patients have been changed to preserve identity).

Hallucinatory voices

Jimmy is a man who paces the floor continually on the ward and in the Centre. He responds to auditory hallucinations, visibly gesturing and audibly engaging in dialogue. He is completely unaware of his surroundings unless you stand in front of him and ask a question. On one occasion the question was, "Will you go into the chipmunk cage and feed them?" The response was unexpectedly positive and he entered the cage. He stood in the cage with the chipmunks running all over him and taking food from his hands, and he was completely focused on them, laughing at their antics. The animals appeared to be a diversion from his symptoms. However, there is one drawback. He empathises so much with the animals that are confined that he wants to set them all free.

Obsessive compulsive disorder

Another instance where the chipmunks have helped involved Tim who suffers from obsessive compulsive disorder. Tim has a consistently negative outlook. In the morning you ask him how he is, and without fail he replies, "terrible". Smiles are rare. This man performs a set of rituals including handwashing using around a full packet of paper towels, and holds a paper towel to accept the lighter to light his cigarette in an attempt to avoid contamination.

new patients don't know what to expect and have understandable anxieties about their new surroundings



Chipmunk

It was therefore a big surprise when he agreed to enter the chipmunks' cage and feed them. At first he looked selfconscious, but this quickly changed. As his attention was caught by the fast-moving creatures, and although not vocal about his enjoyment, he smiled broadly and stayed in there for 10 minutes or so. He fed the chipmunks from his hand, without the need of a paper towel. The transformation was remarkable. This is a man who is concerned only about himself, and yet he asks frequently if the animals are faring well. He has developed a special liking for the cat, Splash, and he can often be seen playing with the cat and talking to him. If you want to talk to him, the best time to do it is just after he has been interacting with the animals.

Motivation

Motivation is often lacking in our patients. Some appear to view their lives as suspended until they are free again, while some simply see no point in doing whatever is asked of them. One patient, who spent much of her time picking up specks from the carpet and showing no desire to take part in any activity, reacted very favourably when she saw our therapet dog, Harvey, a West Highland Terrier. At that time Maureen rarely left the ward. Her sole motivator appeared to be her next cigarette. Maureen's reactions of smiles and friendly gestures were noted by staff, who asked if we would let Maureen take the dog for a walk around the grounds. We were happy to do this, and so was Maureen. On returning to the ward after the first walk, staff reported that this patient became motivated to change her clothes and take an interest in other things. The walk became a weekly event, and during the walks Maureen, who had difficulty talking coherently, talked to other patients she met and had conversations with us about her previous experience of dogs. It was obvious that she was very fond of Harvey, because her face simply lit up when she saw him. This patient was subsequently transferred to a local hospital, and after about eight months, Harvey was taken to see Maureen in her new location. Maureen remembered Harvey and expressed appreciation at his visit.

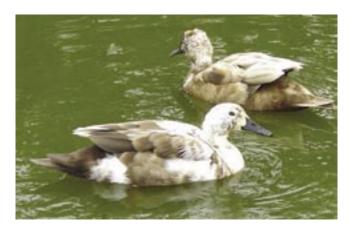
Breaking the ice

Patients new to both the Hospital and the Centre do not know what to expect, and have understandable anxieties about their new surroundings. During these sessions we try to get to know these patients through having a cup of tea and a chat with them and showing them around. Sometimes patients refuse to take part, simply sitting and displaying little or no interest in their environment. This was the case with Andrew, a young man whose face was devoid of expression during three sessions. He refused to answer questions, and did not speak at all, either to us or to other patients until the day we took him and the other patients to feed the hens. We pushed a bowl of food into his hands as we unlocked the gate to the hen enclosure, and when he saw the hens all running towards him with their comical gait, he became animated. After that he asked to feed the hens, and spoke to staff, albeit to a limited extent. Subsequently Andrew asked to come to the Centre on a regular basis.

Coping mechanism: Sorting out your head

Sometimes patients may be experiencing emotions that we are unaware of. In 2003 we held our first Animals as Therapy Study Day. Grant, a patient who regularly attended the animal sessions to clean out cages and generally look after the animals, agreed to speak about his experience, and about how he felt it had helped him. As the day approached it was thought that it was going to be operationally too difficult to arrange for Grant to take part. On the morning of the Study Day, this was explained to Grant who listened to the reasons and said that it was a pity because he had written a speech. The speech was viewed, and it was arranged for Grant to attend the Study Day. He told us about his disturbed childhood, his illness, and his feelings upon arrival at the State Hospital, and how, if he needed to "sort his head out", a morning with the animals was the thing that did it.

Ducks





"I like getting off the ward. There's something quite nice about the Centre - relaxing in some sort of way."

PATIENT QUOTE

"Of all the benefits we have observed, the most important is the increase in social interaction. The animals provide a bridge that can then be used to facilitate the development of the therapeutic relationship."

ALEXANDRA MORE, Nursing

Guinea Pig

Coping Strategy

The first case of Animals as Therapy being used in the Hospital as a deliberate coping strategy involved James, a patient with a learning disability. James loved all of the animals, and worked tirelessly with them, making great attempts to win their trust. He talked to his Consultant Psychiatrist about them, and we were asked by his doctor to take photographs of what James did while looking after the animals. James now has a portfolio of photographs beside each of which he has written details of his interactions with them and how they make him feel.

James uses his portfolio when he feels angry, upset or disappointed. He relives how he feels when he is attending to the animals. Since this was put in place, there have been no reports of aggressive incidents.

Aggression

Aggression is another way of coping, however it is socially unacceptable. Many patients with a learning disability find it difficult to express their feelings and can display anger and aggression, perhaps in frustration at being unable to control their situation, or talk about how they feel.



Rabbits

overall the animals help make a community like environment





During a weekly visit with rabbits or guinea pigs to one ward, we noticed that Margaret, a young woman with an impressively violent history, was consistently calm and concerned around the animals, and she would hold them gently and talk to them. This woman attacked staff and other patients, and damaged furniture in her room on an almost daily basis. After some weeks of visiting, we had a phone call from her ward telling us that she was confined to her room, refusing to do anything and was particularly hostile. We were asked to bring over one of the guinea pigs. We agreed that the guinea pig would be safe because of Margaret's previous attitude towards the animals. Through the closed door, the nurse told her that she had visitors. Her hostile reply was that she did not want to see anyone. When the door was opened and she saw the guinea pig, her tirade stopped. Her confrontational attitude disappeared and she asked us into her room. Despite our apprehension we went in. Sitting up in bed, Margaret held out her hands for the guinea pig. She held him tenderly, talking to him. After five minutes or so, she handed him gently back, and announced that she wanted to hoover her room, and get something to eat.

Two guinea pigs were subsequently housed in the ward garden, and Margaret was delegated to look after them. Sometimes she did, and sometimes she didn't. At all times she showed affection and concern for the animals.

We made a comparison of the number of incidents initiated by Margaret over a six month period: three months prior to the guinea pigs being kept in the ward garden, and the first three months that they were there. In the first three months of the project, there were 24 reported incidents of aggressive behaviour; however in the last three months of the project, there was a notable reduction to ten incidents. Some incidents involved both destructive behaviour and attempted assault. The following is a breakdown of the incidents reported:

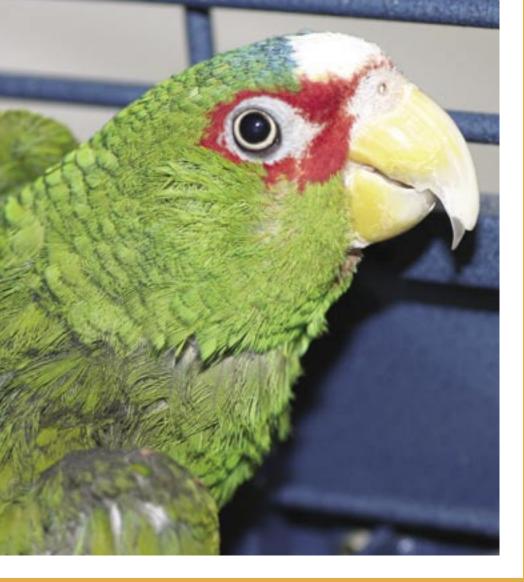
Behaviour type	First 3 months without guinea pigs	Second 3 months with guinea pigs
Destructive	6	6
Physical assault	3	1
Verbal aggression/ threats/attempted assault	17	6

We visited the ward 48 times during the latter three months, and spoke to Margaret on 40 occasions during these visits. Every time Margaret showed care and concern for the animals, and was pleasant to both patients and staff. On 28 of the days we visited, it was reported that Margaret had contact with the guinea pigs, but may have had contact with them at weekends also.

Of course there is no proof that the guinea pigs were any help at all, however, we do know that the guinea pigs had a calming effect on Margaret, and overall the animals help make a community like environment.



Fergie (Indian Runner Duck)



"I like to look after and groom all the pets." PATIENT QUOTE

"I am impressed that there are procedures in place for infection control and prevention, namely warning signs, segregation, hygiene measures, disposal of animal waste, cleaning and disinfection, immunisation and protocol for reporting injury."

KAREN BURNETT

Fred (Parrot)

07 Facilities

Our facilities consist of two fields (approximately .75 acres each) and two sheds. One field is for the two pigs, and the other is for the hens, ducks, geese, goats and lambs. The latter have access to the concrete stand outside the shed where the goats and pigs have their sleeping area. The concrete stand area is easy to brush and hose down.

There are two sheds (both 20' x 10') - one for the pigs, goats and feed store, and one for the rabbits and the aviary. Some rabbits have access through a tunnel to an outdoor exercise area; this area has fencing sunk two feet below ground level to prevent the rabbits from digging out, and there are also three hutches. The other rabbits are in cages in the shed together with the guinea pigs. These rabbits are exercised outside individually, either because they are unneutered males, or they are females who do not get along with the other rabbits. There is a second rabbit exercise area, shut off from the first area to allow the grass to grow for the rabbits. When there is grass the rabbits are allowed there during the day. The cages in the rabbit shed can be made bigger or smaller with the use of dividers. Rabbit cages have greater height than guinea pig cages to allow the rabbits room to stretch upwards. Both sheds have electricity, and the rabbit shed has two sinks. The sheds are floored with wood, and are lined with 1" plywood, which keeps them warmer in the winter; there is less chance of infestation by rats, and the likelihood of frozen water bottles. There is an outside standpipe for filling buckets, and separate hand washing facilities.

all our animals receive regular care with their needs adequately and timeously catered for



Molly (Guinea Pig)

The hens are housed in a separate smaller shed $(6' \times 8')$ in their field. There are two feeders in the shed and a drinker in the winter. Eight nest boxes are attached to the outside of the shed and eggs can be retrieved without entering the shed. There are also several drinkers about the field as well as a duck pond. Other peripheral facilities include a small shed that can be used for a nesting duck or broody hen, or as an isolation unit for a sick bird. There is another small shed for the geese (these sheds are both very small, not big enough to walk into), and also four fenced off pens which can be used for special breeds, or in the unfortunate event of bird flu, the hens and other birds can be kept there with one or two minor adjustments. There is a climbing platform for the two pygmy goats. There are two large stainless steel troughs, one for the pigs and the other for the goats, although this is used for other things too - the ducks sometimes have a bath in it.

Having so many animals means there are a lot of activities available for patients, however they have to be looked after whether the patients are there or not. If the Centre has to close for any reason, the animals still need to be cared for. It is not an option to leave them until it is convenient for someone to feed them or check that they have enough water. It is recognised that in order to provide the benefits that are possible with Animals as Therapy, consideration is given to two main areas:

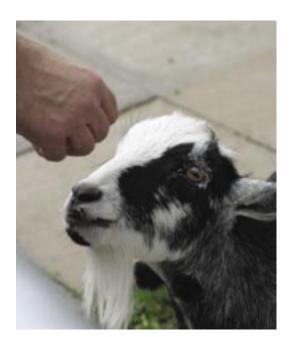
- The welfare of the animals so that they learn to trust and rely on their carers.
- The responsibility involved in caring for animals.

This, together with our knowledge of the individual requirements of all our animals, ensures they receive regular care with their needs adequately and timeously catered for. Additionally, we take steps to avoid our animals becoming ill, not only to minimise vet fees but to avoid the distress to the animal and carers.



Harvey (West Highland Terrier)





Holly (Goat)



I like working with the animals because they need a lot of looking after, and the benefit of looking after the animals is that you can get a bond with them.

PATIENT QUOTE

The atmosphere is therapeutic and relaxing where learning and rehabilitation can be fun and rewarding for all.

Senior Rehabilitation Instructor

luscovy Duck and Ducklings

08 Animal Care

Looking after any animal is a huge commitment. Within the State Hospital this care involves everything from food and nutrition to the needs of specialist environments, relations with staff and patients, routines, hygiene and welfare.

Rabbits

The main part of a rabbit's diet should be good hay. This keeps their teeth in good condition and is good for their digestion. Once food has passed through their digestive system it arrives at the anus as a sticky black substance, and they eat it again, resulting in small hard pellets. This is because their diet is low in nutritional value and this gives them the best chance of optimum nutrition.

A small piece of carrot or apple and some green leaves (we use kale or dandelion) or pulled grass is also given. If they are not given hay and are given unlimited amounts of "rabbit food", the likely outcome is that they will fill up on the bits they like and leave the rest. This is a balanced diet, but not balanced if they only eat part of it. An imbalance in the digestive system occurs, and they put on weight. They cannot be bothered to reprocess their food, or they put on so much weight that they are unable to reach their anus to reprocess their food. They end up overweight with misaligned teeth, runny eyes and very messy bottoms that have to be washed, and suffer premature death.

We use dried food as treats, giving only a small handful per rabbit per day. If there is food left, they don't get any more. It has been a long time since we have had a rabbit with a dirty bottom! We do from time to time receive an unwanted rabbit that has never been used to eating hay, and it is very difficult to persuade them to start. We never give our rabbits lettuce, since this has been shown to be detrimental to their health. The State Hospital has the advantage of the animals receiving routine care and consequently providing the best therapy



Lambs and Goat

Some patients feel they are being kind to animals by giving them extra food/treats; however this is not the case. The difficult part of the process is educating patients that the extra food can be detrimental to the animal's health.

Rabbits need exercise, company, and room to stretch when they are in their hutch or cage.

Guinea pigs

These animals should not be given potatoes. We ensure their diet includes Vitamin C every day because like humans they cannot make it themselves. They also need a good supply of hay, but no straw because it can irritate their eyes. They eat hay, make their bed in it, and hide under it. Again, a small amount of dried food is enough, and if they do not eat it, we don't replenish it until they do.

Hens

Hens and geese seem to love bread, but too much is not good for them. Both have unlimited access to layers pellets (food) and bread - three slices between the 25 hens and two for the geese.

Birds

Birds need company, space, the opportunity to fly as well as shelter and preferably some natural environmental features such as plants, shrubs or trees. Parrots and cockatiels like bright colours.

Disinfectant

Disinfectant should be used very sparingly, firstly because the smell of it masks the animals' own scent that they go to great pains to mark their surroundings with in order to feel comfortable and secure, and secondly because it kills off both harmful and beneficial germs. Regular cleaning out and occasional use of disinfectant is recommended, always ensuring that the correct dilution is prepared.

In conclusion . . .

Currently there is no indication that patients who leave the State Hospital can continue to benefit from Animals as Therapy in their local hospital, or in prison, except in isolated cases. In some instances, patients who have benefited from Animals as Therapy ask for such a facility in their new environment and this is sometimes accommodated on a small scale.

Our experience has shown that giving an individual patient entire responsibility for caring for an animal has drawbacks, including security requirements where patients are not allowed free access to their animal, illness of the carer, ward-based problems necessitating staff involvement elsewhere, lack of knowledge of an animal's requirements, and so on. It therefore appears that a purpose-built facility such as at the State Hospital has the advantage of the animals receiving routine care and consequently providing the best therapy. The only disadvantage to this system is that when the patient is feeling unwell and is unable to leave the ward, the animal is not always accessible.



Chipmunk

Articles Held in the Hospital

Date	Title	Authors	Source
1977	Pet dogs as nonverbal communication links in hospital psychiatry	Corson et al	Comprehensive Psychiatry Vol 18 1
1980	Pet animals as nonverbal communication mediators in psychotherapy in institutional settings	Corson, Corson	Ethology & Nonverbal Communication in Mental Health (pp. 83-110) Oxford: Pergamon Press
1983	Selecting the best companion animals: breed and gender specific behavioural profiles	Hart, Hart	The Pet Connection
1984	Human/Companion animal therapy	Levinson	Journal of Contemporary Psychotherapy14.2
1984	A new look at pet-facilitated therapy	Beck, Katcher	JAVA 184.4
1987	Seeking a theory of the human/companion animal bond	Kidd, Kidd	Anthrozoos 1:140-157
1987	The human-animal bond: implications for practice	Netting, Wilson et al	National Assoc. of Social Workers Inc.
1990	Defining the role of pet animals in psychotherapy	Draper, Gerber, Layng	Psychiatric Journal, Univ. Ottowa Vol 153
1991	The pet as an anxiolytic intervention	Wilson	Journal of Nervous and Mental Disease
1991	Health benefits of companion animals in relation to the physiologic indices of relaxation	Baun, Oetting, Bergstrom	Holistic Nursing Practice 5 (2) 16-23
1991	Pet project: the use of pet facilitated therapy among the chronically mentally ill	Hundley	Journal of Psychological Nursing Vol 29 (6)
1991	Beneficial effects of pet ownership on some aspects of human health and behaviour	Serpel	Journal of Royal Society of Medicine 84
1993	Secret power of pets	Vines	New Scientist
1993	Companion animals: in sickness and in health	Siegel	Journal of Social Issues Vol 49 157-167
1994	A conceptual framework for human-animal interaction research: the challenge revisited	Wilson	Anthrozoos, 7(1), 4-12
1994	Pets as adjunct therapists in a residence for former psychiatric patients	Nielsen, Delude	Anthrozoos, 7(3), 166-171
1994	The training of pets as therapy dogs in a women's prison: A pilot study	Walsh, Mertin	Anthrozoos, 7(2), 124-128
1994	Animal-assisted activities/therapy as an animal and human welfare project	Nebbe	PSYET Vol 18
1995	The attachment of people to companion animals	Endenburg	Anthrozoos Vol VII 2
1995	Social interactions between animals and people - a new biological framework	Bradshaw	In Animals, Health and Quality of Life: abstract book of the 7th International Conference on Human-Animal Interactions, Geneva. Paris: AFIRAC

Date	Title	Authors	Source
1995	Relationships between young people with autism and their pets	McNicholas, Collis	Delta Society abstract
1995	Animals and cardiovascular health	Jennings	Delta Society Report
1995	The effects of "pets as therapy" dog on persons with dementia in a psychiatric ward	Walsh et al	Australian OT Journal 42, 161-166
1996	Animal-assisted therapy: a nursing intervention	Carmack, Fila	Nursing Management
1997	The therapeutic relationship between animals and patients	Rennie	SCAS Journal
1997	Animal-assisted therapy with hospitalized adolescents	Bardill, Hutchinson	JCAPN Vol 10 1
1998	Animal assisted therapy: assessing the benefits	Barker	Journal of Small Animal Practice Vol 39
1998	The effects of a dog visiting programme on patients with schizophrenia	Shin, Choi	8th International conference on H/A interactions
1998	The effects of animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients	Barker, Dawson	Psychiatric Services 49.6
2000	Pet assisted psychotherapy	Mason, Hagan	National Library of Medicine
2000	Pets as therapy: effects on social interaction in long-stay psychiatry	Hall, Malpus	British Journal of Nursing 9.21
2000	Dogs as catalysts for social interactions: robustness of the effect	McNicholas, Collis	Delta Society abstract
2000	Bonding with therapy dogs helps victims heal	Benak	On the Edge - International Association of Forensic Nurses 6.4
2000	The use of service dogs as an adaptive strategy: a qualitative study	Camp	American Journal of OT
2000	Lovebirds transform South Africa's hardest criminals	Flanagan	Sunday Telegraph
2002	Animal assisted therapy in Spanish prison programmes	Toner	SCAS Journal XIV 1
2002	Pet dogs or cats, but not ACE inhibitor therapy, attenuate blood pressure and rennin reactivity among hypertensive stockbrokers	Allen et al	Delta Society Report
2002	Physiological effects of the use of a companion animal dog as a cue to relaxation in diagnosed hypertensives	Schuelke, Trask et al	Delta Society Report
2002	Down on the farm	Bridger	Therapy Weekly Mar 14

Pet Animal Policy

Aims and Rationale

The health benefits of animals have been well documented, and these include lowered blood pressure and heart rate (Katcher et al 1983, Friedman et al 1983) and reduced anxiety levels (Barker & Dawson 1998, Wilson 1991). It is thought that animals promote social interaction (Hall & Malpas 2000) and links between social engagement and levels of anxiety have been made. The use of animals as part of therapeutic activity is now well established in the State Hospital, and the range of animals now includes pigs and goats as well as the more traditional 'pets'.

1. Security

1.1 Visitors bringing dogs in for therapeutic purposes, as agreed by the staff team, will comply with State Hospital security regulations. Areas to be visited will be agreed in advance with Security.

1.2 For resident animals being taken to wards or other areas, permission from the person in charge of the ward or area will be sought. If this is in the grounds, security permission will be sought.

2. Zoonoses

Disease that may be passed from animal to human. These include Chlamydia Psittaci or Ornithosis, Toxoplasma, Orf and Ringworm.

Legal Requirements (COSHH 2002)

2.1 Warning signs: An information sheet outlining the main zoonotic diseases and infections has been displayed in the Centre.

Patients will be reminded to wash their hands after handling any animal. Reminder notices have been placed in all animal areas. **2.2 Disposal of Waste:** Always wear disposable rubber gloves and plastic apron when cleaning and emptying litter trays or handling animal faeces.

Take care when disposing of animal faeces. When animal waste is mixed with straw, wood shavings etc it can be disposed of in the general waste system.

Pregnant women should not undertake any of the tasks listed above because of the risk of toxoplasmosis.

2.3 Vaccines: Staff working routinely in the area will be offered immunisation against tetanus.

Patients who sustain a puncture type injury whilst at the Centre will be referred to the GP as soon as possible.

2.4 Hygiene measures: Patients, visitors and staff will be reminded to wash their hands after handling any animal.

Animals will not be taken into areas where food is being prepared or eaten except where the therapeutic value is considered by the Nurse in Charge to outweigh the risks. Handling of products of animals such as eggs will be supervised by staff, who will ensure that a patient handling these washes his/her hands afterwards.

Relevant risk assessments can be found in the Health and Safety Control Book, section 2C.



Hen

General Precautions

The Health and Safety Executive (HSE) has produced guidance re avoiding ill health at open farms, outlining simple control measures.

2.5 Hygiene: Make sure animal contact areas are free from build up of faeces.

Clean and disinfect pen divisions and gates in animal contact areas whenever animals are moved out of them.

2.6 Eating areas: Patients and visitors will be reminded there is to be no eating in animal areas.

2.7 Livestock management procedures: Regular three-monthly checks of all animals by a vet will take place, particularly for zoonoses such as salmonellosis, cryptosporidosis, orf or ringworm. If necessary, where there is considered to be a risk of infection, samples of animal faeces will be sent for analysis on the advice of the veterinary practitioner.

Do not put animals that have just given birth, or have just been born, in animal contact areas.

Remove animals that are showing signs of ill health such as diarrhoea or stress from contact areas.

3 Other Precautions

3.1 All visiting dogs should be registered Therapets, insured and certified in good health and of sound temperament, according to the requirements of the Therapet organisation which is approved by the Royal College of Nursing.

3.2 An identified source of information about zoonotic diseases and infections is held in the Garden and Animal Therapy Centre, and the Centre will make every effort to keep these up to date with new information.

3.3 Access to animals will be restricted for those who are immune deficient. Each case will be considered individually, but the general rule will be that an immune deficient patient may observe the animals but may not enter their cage or have physical contact with an animal.

3.4 Bites or scratches will be cleaned and dressed immediately under the supervision of the Nurse in Charge, and the patient's ward informed and an incident report submitted.

3.5 A record of all medicines administered to the animals will be kept in the Centre.

4. Welfare

4.1 Supervision: All interactions between patients and animals will be supervised.

4.2 Client Information: Where it is known by the referring Clinical Team that a patient has abused animals, this information should be passed to the Nurse in Charge of the Centre.

4.3 Handling Animals: Interaction with any animal should not exceed one hour in any one day, or less should the animal exhibit any signs of stress.



Noel (Goat)

Pet Animal Policy continued

4.4 Housing: Housing will comply with documented requirements where these exist. In any uncertainty concerning housing requirements, the SSPCA will be asked for advice. It is the Centre's responsibility to actively seek informed advice on this issue.

4.5 Care: Food and water will be provided daily for the animals.

4.6 Lifestyle: The natural environment and ethology of each species will be considered, and how this will influence where and how often the animals are exercised and how they are handled, with known stressors absent or minimised as much as possible. All effort will be made to avoid boredom and stress in caged animals.

4.7 Suitability: Behavioural suitability of individual animals to be kept in the Centre will be decided by the Centre staff team, advised by the veterinary practitioner or animal behaviourist. Species to be kept in the Centre will be agreed by management and the staff team.

4.8 Disposal: Any animal found to be unsuitable for the purposes of therapy will be re-homed, and if this is not possible, disposed of humanely by a vet.

4.9 Veterinary cover: Visits by a vet will take place every three months. Should any signs of illness occur in any animal between visits, veterinary advice will be sought.

4.10 Training of animals: Any training of animals in the Centre will follow the guidelines of the International Association of Human-Animal Interaction Organisations which state that only positive reinforcement training methods should be used.

5. The Five Freedoms

The Centre will adhere to the five freedoms for all animals:

- Freedom from thirst, hunger and malnutrition
- Freedom from discomfort
- Freedom from pain, injury and disease
- Freedom to express normal behaviour
- Freedom from fear and distress

6. Knowledge base

The Centre will make every effort to keep up-to- date with current research and developments in animal assisted therapy, zoonoses and animal welfare issues.

7. Responsibility and compliance

The policy will be subjected to routine departmental audit.

8. Policy review

The policy will be reviewed every two years by relevant stakeholders to reflect any practice/legislative changes.

9. References:

Animal Welfare Bill 2005 Control of Substances Hazardous to Health Regulations 2002 (COSHH) HSE 'Avoiding ill health at open farms- advice to farmers' Agriculture information sheet 23 Animal Health and Welfare Strategy for Great Britain (developed jointly by Defra, Scottish Assembly and Welsh Assembly Government) Farm Animal Welfare Council (Independent Advisory body established by Government in 1979)

Fergie (Duck)



Gardens & Animal Assisted Therapy Centre



"A place to relax." PATIENT QUOTE



"I like to look after and groom all the pets." PATIENT QUOTE

"Attending the Centre has had a very positive effect on the ability of patients to communicate with others. Some disorganised patients relate easier to animals better than humans; their involvement with animals allows them to focus their interactions and this is transferred to their interactions with staff. We have a very chaotic individual who has difficulties in his interactions and obsessional compulsive behaviours. His involvement in gardens has improved his communications on the ward and his self-esteem through his sense of achievement. It is a popular placement with the patients and one which they look forward to."

> JACQUELINE GARRITY Skye Cenre Manager



"Space and fresh air." PATIENT QUOTE









"The past few years have seen considerable developments within the Centre, and it is an extremely popular area for patients. I am confident through the commitment and enthusiasm of the staff that the Centre will continue to develop and enhance activities for patients."

> BRIAN PATERSON Clinical Operations Manager







"It's motivating." PATIENT QUOTE



"In my viewpoint, there is no doubt that animal interaction in therapeutic interventions has a very positive impact upon patients. Their presence brings a sense of normality to institutional settings. The benefits are countless."

> MARK RICHARDS Director of Nursing, AHPs & Operations

"The therapeutic benefits of human-animal relations have been evidenced, and the utilisation of Animals as Therapy is increasing. Within the State Hospital, the introduction of small animals into the patients' environment continues to provide both physical and mental health benefits in the treatment of individuals with psychiatric illness. Animal therapy is a goal directed intervention within the overall care and treatment process."

GARY JENKINS, Chief Executive





The State Hospital Carstairs, Lanark ML11 8RP Telephone 01555 840293 Gardens & Animal Assisted Therapy Centre 01555 840293 Ext: 4375 Email: tsh.info@nhs.scot www.tsh.scot.nhs.uk