

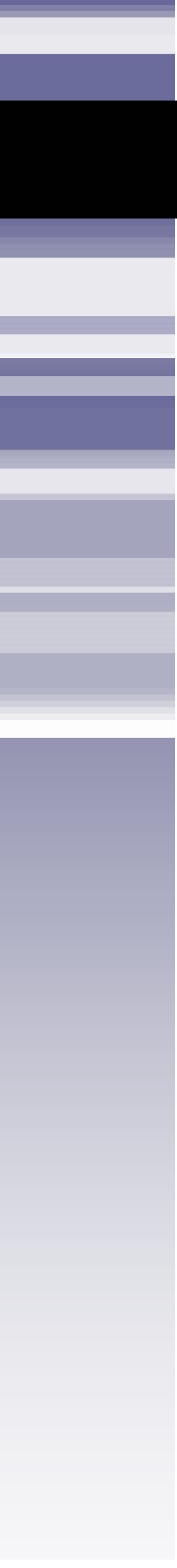


Pest Control: Rats and Rubbish

1 Summary

- 1.1.1 Members of the Transportation and Street Services Overview and Scrutiny Committee identified an issue of concern to their constituents, in terms of the perceived increase in the number of rats in the city and how they were being dealt with.
- 1.1.2 The first step was to gauge the size of the rat population in







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- 3.2.2 Early on it was decided that Brown Rats or common rat (*Rattus Norvegicus*) would be the focus of the review as there are very few Black Rats in this country (*Rattus Rattus* - thought to be responsible for hosting fleas which carried the Bubonic Plague).
- 3.2.3 It was also determined that the domestic service would be the focus, as there is a limited commercial service offered by the Council as a result of a desire not to conflict with enforcement powers also held.

3.3 Methodology

- 3.3.1 The Review Group commenced its work in October 2004 and took evidence in three main sessions in the first half of November.
- 3.3.2 The first session addressed the 'problem' of rats in Birmingham, and sought to establish the number of rats in Birmingham, the main problems posed and what steps the Council should be undertaking in relation to this problem. Members heard evidence from two main witnesses:
- Mr J. Barrie Sheard FCIEH: the Chairman and Promotions Officer of the National Pest Technicians



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- 3.3.5 The final session invited officers from across the Council to discuss the various street interventions and other preventative measures that could and are being undertaken. Representatives from Housing, Waste Management and Building Control attended along with two Environmental Wardens and a District Director.
- 3.3.6 A further session was held to meet with Mr Phil Lenton of Severn Trent to discuss the programme of sewer baiting undertaken by the Council.
- 3.3.7 In addition, Members contacted customers to gather their views on the service. A random sample of 186 recent customers of the Pest Control Service were sent a short questionnaire to gauge their reactions to the service. Fifty-six returned the form (a response rate of 30.1%). Of these, twelve attended an informal discussion group with Review Group Members to discuss their experiences in greater depth.
- 3.3.8 Finally, all members of the Council were invited to give evidence of their experience of problems with rats in their wards.

3.4 Why do we have rats?

- 3.4.1 In order to answer the three questions listed above (section 3.2), it was first necessary to gain an understanding of why rats are present in our environment. Rats thrive where they have shelter and food and can live undisturbed. A number of factors were found to contribute to this.
- 3.4.2 Primarily, the presence of rats is linked to poor and degraded environments. The English House Conditions Survey 1996 found a high correlation between widespread litter, vandalism, unkempt gardens and neglected and vacant buildings, and rat infestations.¹ Neglected and derelict properties may allow rats to escape from sewers to the surface from dried out U-bends or broken drainage fittings.² High density of housing properties is also a factor.³
- 3.4.3 Rats flourish where there is rubbish as this provides both refuge and food. Any increase in litter and fly tipping create perfect habitats for rats to live and breed, as does rubbish left in gardens.
- 3.4.4 Advancement of rubbish is a particular problem in Birmingham with some black bags being placed on the street five or six days early. These may be ripped open by animals or humans and rats will be able to access the food inside.
- 3.4.5 The food source is increased again with the overfeeding of wild birds.

¹ Battersby, S.A.; Parsons, R.; Webster, J.P. *Urban rat infestations and the risk to public health* Journal of Environmental Health, Volume 1 Issue 2 2002 p.7

² *National Rodent Survey Report 2003*, National Pest Technicians Association, Nottingham

³ Battersby, S.A.; Parsons, R.; Webster, J.P. 2002 *ibid.* p.4



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- 3.4.6 Certain forms of landscaping, in particular the use of low shrubs, provides perfect cover for rats, particularly if near an abundant source of food (litter, overflowing waste bin etc).
- 3.4.7 These last three points were also identified as significant factors by



4 Rats in Birmingham

4.1 Introduction

- 4.1.1 In order to appreciate fully the task faced by the Pest Control Service in Birmingham, Members first sought to gauge the scale and character of the rat problem in Birmingham – and indeed whether the current situation actually constitutes a ‘problem’.
- 4.1.2 This chapter therefore addresses the three aspects of this:
- the size of the rat population in the city,
 - the problems associated with rats,
 - the extent of any threat.
- 4.1.3 In the course of the Review, Members came across a number of myths about rats, which are discussed further.

4.2 The size of the rat population

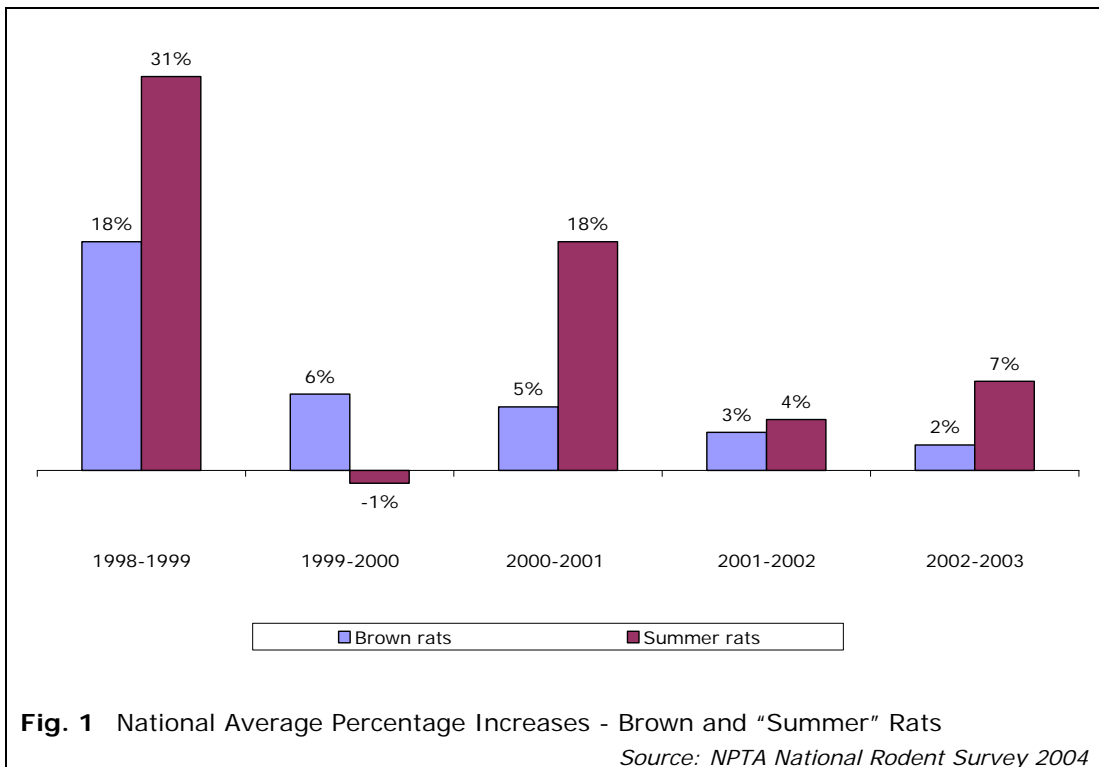
- 4.2.1 It is impossible to put a figure on the number of rats in Birmingham or in the country. No organisation has conducted a census of rats, as the population changes rapidly and is extremely difficult to monitor - indeed very little research has been done into the Brown Rat at all.⁵
- 4.2.2 However, comparative data is available both nationally and locally which demonstrates relative changes in rat populations, both in terms of overall increases and decreases and in changes in “hotspots”.
- 4.2.3 The main source of such information is requests for assistance, i.e. requests for treatment from residents made to local authorities. These are clearly not an absolute measure of rat numbers and will be affected by:
- Communities or individuals who are more used to seeing rats;
 - A preference to deal with the infestation themselves or through private contractors;

⁵ More research has been done on rats in rural areas and in particular the impact on agriculture because of devastation to grain supply. However, rats are much easier to track on farms than in urban areas.





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The Local Picture - Requests for Assistance

- 4.2.10 Data provided by Regulatory Services shows that over the past three years the number of requests for assistance (RFA) for rats in Birmingham has increased by 16%. This does include a decrease last year (2003/04) of 4% (Figure 2).
- 4.2.11 Figure 2 also reveals that the vast majority of all requests for



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- Sparkbrook and Small Heath - 2827 RFAs, 14% of the total.

4.2.13 Other districts with relatively large numbers of RFAs are:

- Ladywood (11%);
- Selly Oak (10%);
- Perry Barr (8%);
- Yardley (8%).

4.2.14 Breaking this information down by ward allows the areas with most RFAs to be pinpointed further. Figure 4 shows that the five wards with the most RFAs are:

- Sparkbrook (1,290);
- Bordesley Green (1,206);
- Washwood Heath (884);
- Springfield (853);
- Soho (806).

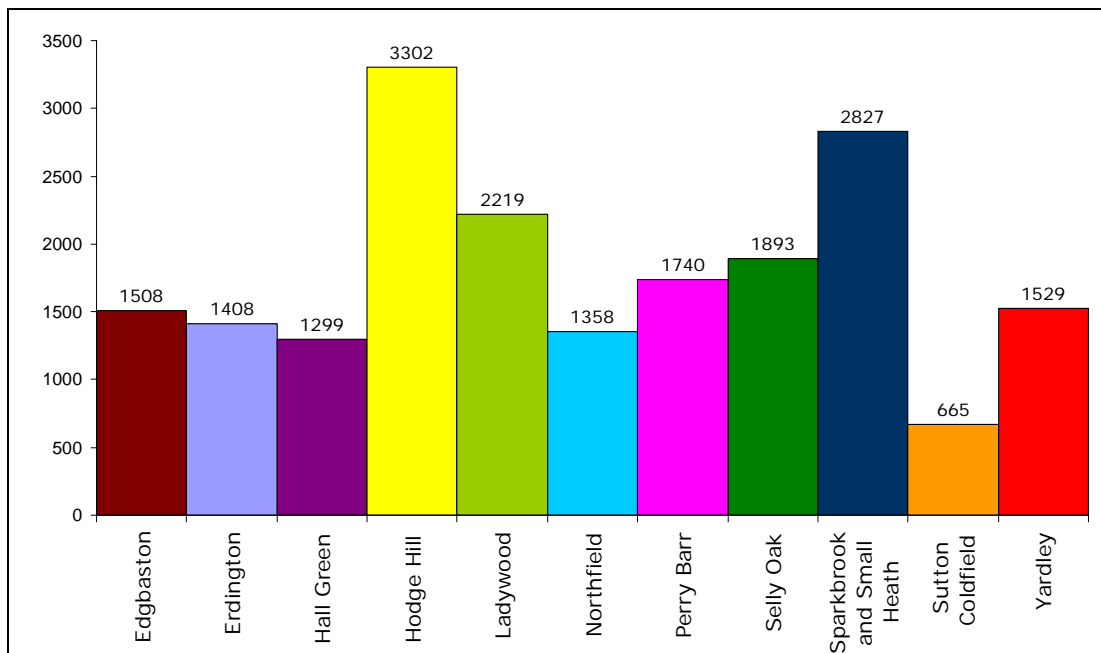
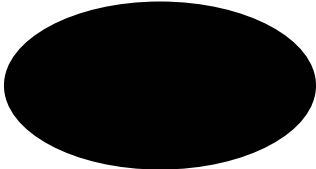


Fig. 3 Requests for Assistance 2003/04 by District

Source: Regulatory Services



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Health risks

- 4.3.3 The main health risk posed to humans by rats is from the **parasites and pathogens** carried by brown rats on their bodies and in urine and faeces. There is an absence of data to link diseases in rats directly to diseases in humans, nevertheless it is known that rats carry a range of organisms (e.g. *capillaria spp*, *leptospira spp*, *toxoplasma gondii*) which are associated with diseases in humans (*capillariasis*, *leptospirosis*, *cryptosporidiosis*)



5 Controlling the problem: The Pest Control Service in Birmingham

5.1 The Pest Control Service – All Pests

5.1.1 Birmingham City Council provides a pest control service through its own Pest Control Team, which is part of the Regulatory Services. The Domestic Pest Control Service includes a free of charge treatment service for rats, cockroaches and bedbugs in occupied homes. The Commercial Pest Control Service includes a range of pest control treatments and clearance services for filthy or verminous materials.

5.1.2 Additional services include:

- The provision of information on how and where free mouse poison can be obtained for residents to deal with any mice problems they may have in the home;
- Fact sheets on ants, bed bugs, booklice, carpet beetles, cockroaches, fleas, flies, foxes, mice, pigeons, rats, squirrels and wasps;
- An affordable chargeable service for treating Wasp Nests in domestic premises;
- A free pest identification service;
- A customer feedback/comTipest identifica7iJ-1cpest identifi



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- Although some proactive work is undertaken in areas of high activity, the service is more usually a reactive service, i.e. any measures are taken in response to residents' reporting of sightings of rats.

In-house service

- 5.2.2 There was consensus amongst the witnesses from the CIEH and the NPTA (who represent both public and private sector members) that an in-house facility was the preferable method of providing this service.
- 5.2.3 The main reason for this is that an in-house service allows for closer working with other departments and the other arms of environmental health provision.

Free service

- 5.2.4 Birmingham City Council does not charge for the service it provides in relation to rats, due to the associated public health concerns. It is possible for the Council to charge for this service, and indeed charges are made for other services provided by the Pest Control Team (for example commercial call-outs and services for wasps' nests). These subsidise the domestic service.
- 5.2.5 A report to the Cabinet Member for Transportation and Street Services in early 2004 outlined the reasons for continuing to provide a free service, which included:
- Charging leads to a reduction in those using the service;
 - Charging would disproportionately affect those least able to pay;
 - The Council has a statutory responsibility to ensure the city is kept clear of rats and this is the most cost effective means of doing so.¹³
- 5.2.6 The tendency for requests for assistance for rats to drop on the introduction of charging is also cited by a number of other sources. There is real concern that this leads to an increased hidden population of rats. Both the NPTA and CIEH support this view. The NPTA in their



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- One authority has re-introduced a free service after a reduction in the number of reported sightings, refusal to pay the charge and the time needed to follow up non-treatments with threats of notices.

5.2.7 As stated in paragraph 4.2.15, there are links between rats and levels of deprivation in Birmingham. The impact of charging is therefore likely to be severe.

Reactive service

5.2.8 The current service is based upon responding to complaints from residents. Requests for assistance can be made by telephone, e-mail or completing an on-line form on the Council website.

5.2.9 Once a complaint is made a Pest Control Officer will visit, and if rat presence is confirmed, will decide how and where to lay bait. Follow-up visits take place to ensure the infestation is eliminated (up to four visits).

5.2.10 The Pest Control Team consists of:

- Seventeen Pest Control Officers and one supervisor for domestic complaints;
- Two for commercial cases;
- Two officers work on sewer baiting;
- A further three are employed on fixed term contracts to work within Sparkbrook and Washwood Heath wards using NRF money, and Aston as part of the NDC programme there.

5.2.11 Commercial premises are also treated by the Pest Control Team, but this service is not advertised as the Council, under Regulatory Services, also holds enforcement powers, including the power to close food premises down if infested. Greater involvement in treating these premises would risk compromising the enforcement side of the work.

5.2.12 The domestic Pest Control Officers are deployed according to demand, determined by the Pest Control Manager and Supervisor according to the level of complaints. Typically one officer covers two wards.

5.2.13 There are some examples of the Team undertaking more pro-active work, for example if there a lot of complaints from a concentrated area, the houses in that area will be leafleted and each house called at to offer the service. However, it is still up to the individ t



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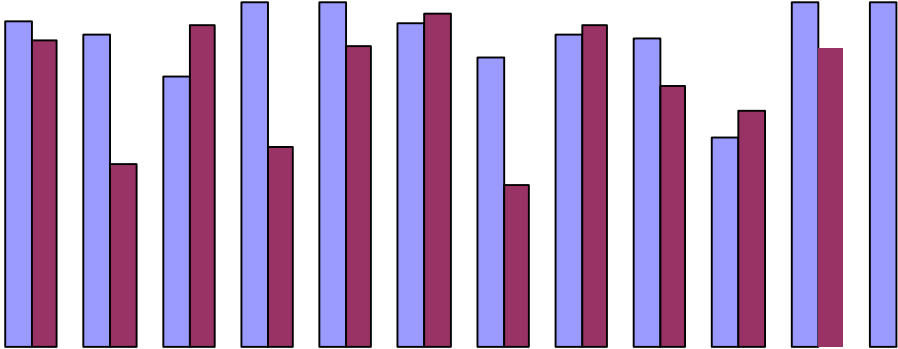
5.3 Performance

Performance data

- 5.3.1 The Pest Control Service publishes service standards – these are contained in Appendix 2.
- 5.3.2 The key performance targets are:
- Response to complaint of rat in garden within 5 days (95%);
 - Response to complaint of rat in house within 24 hours (95%).
- 5.3.3 This data is used to identify where problems lie and intervene if necessary.
- 5.3.4 Data from the previous municipal year

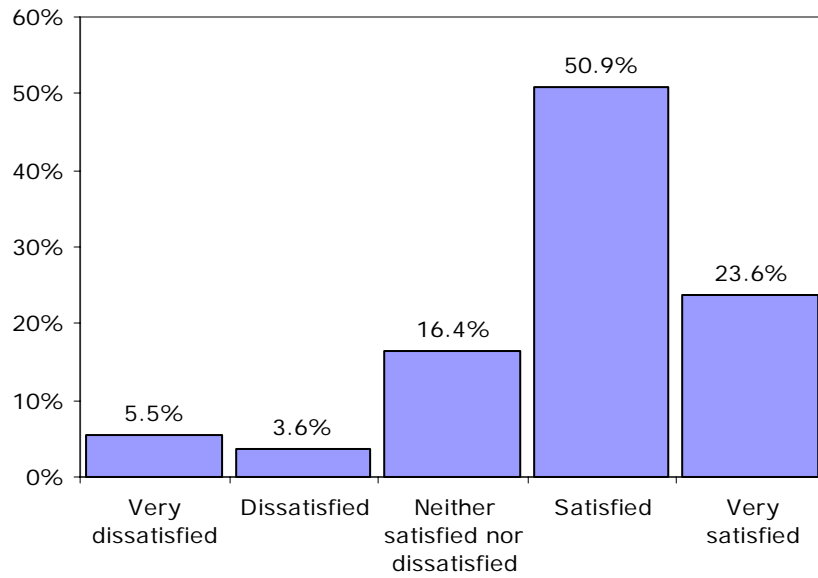


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- 5.3.14 A good example given of responsiveness was where the Pest Control Officer left his mobile phone number with the customer. This enabled the customer to contact him directly if there was any recurrence of the problem.
- 5.3.15 Reported means of finding out about the service were:
- From the Council House Switchboard or Contact Birmingham;
 - Via the Housing Service at the local Neighbourhood Office;
 - By word of mouth from a neighbour;
 - From local Environmental Wardens;
 - Through their local Councillor.
- 5.3.16 Suggested improvements to the service included more proactive work, including educating people to keep their gardens clear and checking whether there were problems with rats around the property that the service is specifically called to.
- 5.3.17 Other suggested improvements were not directly related to the service and included providing dustbins for all properties and pursuing the behaviour of problem student tenants with their university.

Member response

- 5.3.18 Members of the Council were also given the opportunity to comment, as they are often a point of contact between residents and the Pest Control Team. Again, the comments were largely positive:

I have had occasion to get Environmental Services out to people's houses and my experience tells me they respond quickly and efficiently.

Yes, I have always found them to be helpful - in many cases advising residents on courses of action they may wish to take.

- 5.3.19 Problems identified included:

The complaints about rats are not as many as there have been of late. This may be that residents do report the incidents themselves or they are so common that people may take rats for granted, or feel nothing seems to be done about the problem.

Overstretched - too few staff with too many demands on them.

One of the problems people have



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information needs to be relayed in a variety of community languages to reflect the population of Sparkbrook.

5.4 Localisation

- 5.4.1 The Pest Control Service remains a centrally provided service, with relations with the Districts governed by Service Level Agreements.
- 5.4.2 Under this arrangement, the Pest Control Service can continue to guarantee a response to each request for assistance made, regardless of how many have already been made in any one district. The free service will continue to be subsidised by the fee-paying services.
- 5.4.3 There was pressure for the service to devolve, on the grounds that the rat problem is localised (Chapter 4), and districts are best placed to



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- 5.5.3 Severn Trent has responsibility for sewer baiting across 64 local authorities and works with each of these Councils on an individual basis, including one-to-one meetings as well as liaison groups, area and environmental health groups.
- 5.5.4 Birmingham receives a significant proportion of the budget for sewer-baiting from Severn Trent. The result is a planned sewer baiting programme in Birmingham, the focus of which can be adapted according to need (determined by bait take)



6 Prevention and Intervention

6.1 Introduction

- 6.1.1 This report thus far has considered the problem of rats and the Pest Control Service's specific response to them. However, this is a reactive solution to a problem already in existence. In the current lexicon of the industry, the need to manage the environment in a way that discourages or halts the infestation of rats is recognised by using the term "pest management" rather than "pest control".¹⁶
- 6.1.2 Rats are found where conditions are favourable and so prevention is clearly not within the hands of the Pest Control Service alone. A wider view, encompassing an outlook on the street scene, waste management, housing and local issues must be addressed.
- 6.1.3 Such an approach fits with the Council's "Clean and Safe" campaign and the Government's "Crime and Grime" agenda, highlighted in this year's Queen's Speech. These look to tackle community safety and environmental degradation including the street scene, through vigorously tackling problems such as fly-tipped waste, abandoned vehicles and graffiti, which undoubtedly contribute to more rat-friendly surroundings.
- 6.1.4 This chapter looks at the various schemes and actions taken by a range of bodies across the Council and the City which directly or collaterally impact on rat populations. These involve district and ward level programmes as well as more traditional approaches from different departments of the Council.

6.2 Environmental Wardens

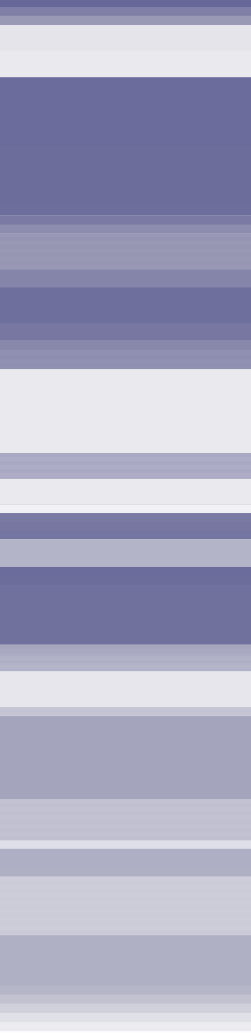
- 6.2.1 The Review Group found that one of the most significant innovations in recent years has been the use of Environmental Wardens. There are now 49 Environmental Wardens employed across the City, with the number set to rise to 59.

¹⁶ Chartered Institute for Environmental Health *The Role of Pest Management in Environmental Health: a guidance document for local authorities* 2003



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- Remove highways and residential shrubberies and landscaping.

6.3.4 A number of individual schemes have been uncovered by this review, some directed specifically at tackling the rat problem, others where reducing infestation is one part of a wider agenda. They range from the Aston NDC programme, to smaller projects initiated by local forums.

Case Study: Aston NDC

6.3.5 New Deal for Communities is an initiative that supports the intensive regeneration of some of the country's poorest neighbourhoods. The Aston NDC programme started in April 2001 and will end in March 2011. The area includes 4,500 households.

6.3.6 A major part of the project is the "Enhanced Environmental Services Project" (approved by Cabinet in September 2004), which seeks to tackle issues of concern to local residents, including the immediate removal of dumped rubbish and street litter and a programme of education and enforcement.

6.3.7 The project represents an holistic approach to the problem of a degraded environment, including the presence of rats. There are four Environmental Wardens and an Enforcement Officer alongside an extra beat-sweeper and a compactor crew, as well as an extra Pest Control



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Case Study: Small Heath South Neighbourhood Forum

6.3.11 The reported rat population in this area is high, due to many contributing factors such as high population density and local bird feeding. Therefore an application for NRF funding has been approved to employ a pest control officer for a period of three months to deliver a proactive exercise. The officer will visit all households in the area, surveying homes and gardens, leafleting and offering advice.¹⁸



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6.3.15 In response to this, it was felt that a range of initiatives were needed to tackle the problem. These include:

- “Bring out your bed” – where a crew works through the area on a Saturday on an ad-hoc basis to collect bulky waste and other rubbish, sometimes accompanied by an Environmental Health Officer;
- Awareness raising with local MPs and Councillors, who would take part in walkabouts;
- A rat education programme, supported by funds raised from BCEN, including a high impact leaflet, aimed mainly at student households on the factors in rat infestation and the dangers, and encouraging landlords to supply sealed containers for rubbish.

6.3.16 It is felt that targeting landlords and letting agents rather than the students is a more efficient use of resources due to the transient nature of the student population. Given the over-supply of property in the area, appealing to landlords to make their properties more attractive would also benefit them.

6.3.17 The project is on-going and the Forum will continue to work with the Guild of Students at the University of Birmingham, utilising *Redbrick*, the student newspaper, to get across the health message.

6.4 Education and Enforcement

6.4.1 The above projects illustrate that a lot of time and effort is going into persuading some people that they need to change their habits with regard to waste and litter. Such an approach depends on both *education* and *enforcement*.

Education

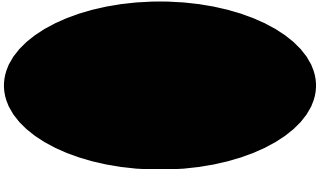
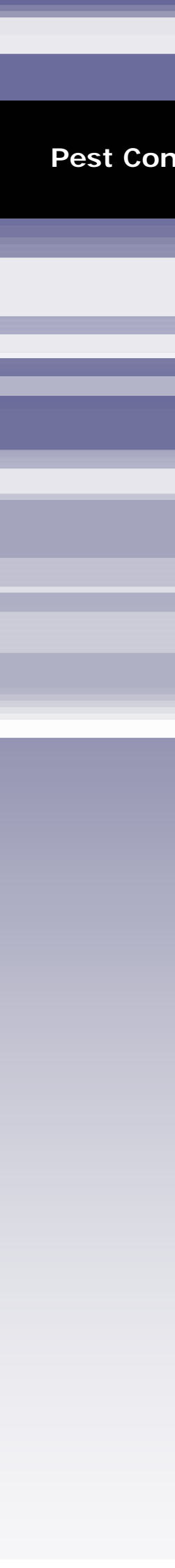
6.4.2 Each of the above schemes clearly pays a great deal of attention to raising the awareness of residents with regard to the consequences of



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- 6.4.4 This clearly demonstrates under-reporting of the rat problem – the officer also found that 60% of residents spoken to were unaware the Council provides a free service in relation to rats.
- 6.4.5 Currently the service is publicised via the website, leaflets, yellow pages, A to Z of Council Services, at Neighbourhood Offices and in the Birmingham Voice (recent article). There is clearly a question as to how effective this approach is.
- 6.4.6 The Pest Control Service also publishes a leaflet outlining what attracts rats and how to spot an infestation (Appendix 3).
- 6.4.7 However, the problem is much broader than this: any educational campaign needs to focus on the dangers of rubbish left lying around, the danger of having rats and wider issues of responsibility for property owners.
- 6.4.8 It is unlikely to be effective to focus on a leaflet (Appendix 4.7) as it is not clear how it will be distributed to all residents.

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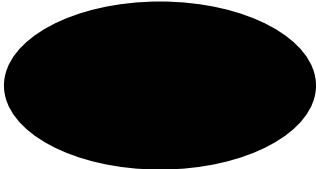


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6.5.6 A relatively small number of routine inspections of private rented



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R02	An evaluation should be conducted of the cost-benefits or otherwise of providing additional visits to bait once an infestation has been identified.	Cabinet Member for Transportation and Street Services	December 2005
R03	<p>A review of the effectiveness of the publicity measures currently used in-house to promote awareness of the Pest Control Service should be undertaken.</p> <p>This should identify steps to increase awareness of the service across the city, taking into account:</p> <ul style="list-style-type: none">• available resources to deal with the resulting demand;•		



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alleviate retention problems and facilitate the development of a dedicated and properly co-ordinated team.

8. *Environmental Wardens are currently not trained to recognise the signs of rat infestation. This can lead to unnecessary call-outs for Pest Control Officers.*
9. *The Pest Control Service works well with other Council departments. However, there is more scope for cross-departmental working to reduce the incidence of infestations. This could include work with departments on designing landscaping or with the Housing department in emptying void properties of food sources and treating for infestations.*

	Recommendation	Responsibility	Completion Date
R04	Training for Environmental Wardens should include elements of pest recognition to enable infestations to be identified correctly.	Public Protection Committee	September 2005
R05	Consideration should be given to employing more Environmental Wardens using mainstream funding. A report should be presented to the Transportation and Street Services O&S Committee.	Public Protection Committee	November 2005
R06	The Pest Control Service should identify areas across the Council where liaison with other departments would result in more effective pest management. An action plan to deal with key priorities should be developed with these departments.	Cabinet Member for Transportation and Street Services	December 2005



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7.5 Progress on Implementation

- 7.5.1 In order to keep the Committee informed of progress in implementing the recommendations



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A2.2 Pest Control: Domestic Premises

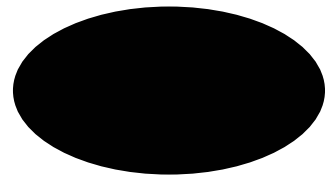
- A2.2.1 We provide a FREE service to treat for rats, bed-bugs and cockroaches in occupied domestic properties.
- A2.2.2 We also supply mouse poison free of charge to any Birmingham residents to self-treat for any mice problems they may have. This is available free from the City Council's Neighbourhood Offices and Regulatory Services District Offices.
- A2.2.3 We provide an affordable CHARGEABLE service for the treatment of wasps in residential premises. See our page for details on the Wasp Nests service and charges.
- A2.2.4 We do not provide treatment for:
- Squirrels;
 - pigeons and other birds;
 - houseflies;
 - fleas and ants - however crawling insect powder is available for a small charge from Neighbourhood Offices and most hardware/DIY stores. Please remember to follow the instructions carefully and use pesticides safely;
 - foxes;
 - bees - which are a protected species. In most cases it is illegal to kill bees and the most appropriate method of control is the safe removal to a hive. The City Council does NOT provide this service and you should contact a local beekeeper via the British Beekeepers Association who may charge for their services. The City Council does not recommend or endorse any particular beekeeper or accept responsibility for services provided.

A2.3 Pest Control - standard conditions of service

- A2.3.1 We aim to make the first visit within five working days of a treatment service being requested.
- A2.3.2 For any treatment visits arranged, morning appointments are usually any time between 8am and 12noon, and afternoon appointments are usually any time between 12noon and 4.30pm. We operate weekdays Monday – Friday (except bank holidays), but we are currently unable to make weekend visits.
- A2.3.3 If we call, but there is no access we will leave a calling card with our contact details to advise that a visit was made.



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Appendix 3 Information leaflet on rats

A3.1.1 Rats are a worldwide pest due to their capacity to cause structural damage, spread disease and to compete with humans for food.

Breeding Habits

A3.1.2 Rat populations can grow very quickly because they can breed throughout the year if they have abundant food and mild weather. A female rat can have 7 litters of 8 – 10 offspring in a year. Rats can live for up to 3 years, although in the wild the lifespan is about 18 months.

What do rats eat?

A3.1.3 Rats will eat almost any food source available including dog mess, their own droppings or each other. They must also drink, so a supply of water is needed.

What to look for?

A3.1.4 Rats can live both indoors and outdoors so evidence can usually be found:

- Droppings are the most easily identifiable evidence, usually dark in colour and about the size and shape of a sultana;
- Burrows - Naturally a burrowing animal, they can live in gardens by burrowing under sheds, into piles of rubbish and compost heaps. The burrow entrance will be 70 – 120 millimetres diameter;
- Smears can be found along surfaces where rats have been running. It is a grey/black build up of grease from their fur;
- Footprints may be found in mud, dust or flour;
- Damage to packets of food, electrical cables, gas and water pipes, woodwork and shredded paper for nesting maybe found. Rats must gnaw hard materials such as wood, plastic and soft metals to keep their front teeth short.

What can be done to control rats?

A3.1.5 The Pest Control Section provides a free treatment service for rats at occupied houses and gardens. The Council uses poison baiting as the method of treatment. Where poison is used, children or household pets must be prevented from access to the bait. Do not expect instant results. It can take 3 – 10 days for the rats to die after eating the poison.



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Prevention of rats

A3.1.6 To prevent re-infestation by rats and improve the effectiveness of any control by poisoning it is essential the following works are carried out:

- In houses it is essential that good hygiene and proofing be carried out;
- Hygiene – any areas where evidence of rats is found must be free from all food sources. This will involve thorough cleaning of food equipment such as cookers, fridges/freezers and microwaves to remove any food debris and spillages;
- Ensuring stored foods such as packet foods, fruit and vegetables are positioned where rats cannot feed on them and if necessary place them in air tight or metal containers to prevent access;
- Proofing – this is the technical term for blocking holes and gaps rats may use. Any holes or gaps must be