

# Fota Wildlife Park

## Environmental Improvement Plan 2011



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## 1.1 Introduction

Fota Wildlife Park (WLP) is located in Foaty Island, East Cork. The Park's Director Mr Sean Mc Keown is committed to participate in the Waste Prevention Programme funded by EPA and implemented in the Cork region by Dr Mary Stack of the Environmental Awareness & Research Unit - Cork Co. Council. The aim of the programme is to identify practical implementable measures which will lead to waste prevention and a reduction in energy and water consumption.

This programme supports actions required for An Taisce's Green Flag Award. Fota's educational centre is managed by educational officer Ms Linda Mc Sweeney-Walsh and is currently working on the green flag programme.

The WLP was first opened in 1983 and is open 364 days per year with approximately 375,000 visitors. The park consists of an animal park, housing for animals, workshop, educational centre, cafes & restaurant, administration building and educational centre.

Fota is however much more than just the wildlife park. It is an education resource which does much to promote ecology, protection of animal life and the education of children & adults in wildlife protection. Through this LAPN initiative, the WLP has the opportunity to promote the park as a sustainable and environmentally interactive attraction.

Educational message from sustainable operational improvements arising from the LAPN programme should be extensive. This in turn complements the environmental educational courses currently being run and delivered by Fota's Environmental Educational Officer.

Participation in this LAPN programme aims to assist the staff at Fota to improve environmental performance through the implementation of good environmental practices. Environmental management is an all encompassing process that should include every aspect of Fota's organisation from finance, human resources and public relations to maintenance, purchasing and planning.

A common barrier to developing, implementing and maintaining a full and effective environmental management system is often due to uncertainty on how to progress. To help initiate this process, the following pages include an evaluation of current practices in addition to various checklists that outline some of the elements that should be considered to increase environmental performance.

When starting an environmental programme the basic steps which you should consider include:

- Management commitment to improvements.
- Staff involvement.
- Identification of realistic achievable targets.
- Continual monitoring.

The combined effect of the above steps is improved environmental performance and a competitive advantage for your business. This process involves identifying the current situation with regard to environmental performance and identifying and implementing practices which will result in improvements. Improved resource use and prevention opportunities are easy to identify when you have clear and comprehensive information about your organisation's activities.

In general, the day to day workings of the park includes the waste generated in the yard, the water used for animals, cleaning and toilets, the electricity used for lighting/heating, the fuel used for on-site vehicles, etc. The resources used for this part of the parks activities are independent of number of visitors each year.

The patron facilities are concentrated around the two restaurant areas where food and beverages are sold as well as souvenirs. Waste, water and energy are all involved and the usage levels here are directly proportional to the number of visitors each year.

A useful tool when looking at improving Fota's environmental performance is looking at key performance indicators relevant to their business. The identification of key performance indicators is very important as environmental improvements are undertaken. KPI's can best measure Fota's improvements will be agreed with the Green Team

*FOOTNOTE: KPI's are calculated by comparing different operational periods and resources used against production or a sector based constant. KPI's will allow business compare previous environmental performance against new practices and also monitor and evaluate improvements. Key performance indicator examples include:*

*kg of waste / per visitor  
kWh energy / per m<sup>2</sup>  
floor area / m<sup>3</sup> water*

## 2 Improving Environmental Performance

In addition to the environmental improvements that can be achieved in business by introducing good housekeeping measures, potential additional benefits include:

- Corporate social responsibility and enhanced corporate image.
- Economic competitiveness.
- Reduced resource consumption.
- Cost reductions through improved efficiency.
- Increased awareness of current and future environmental legislation.
- Attractive to 'green' visitors/tourists and assists with marketing.

### 2.1 Role of the Green Team.

- Fota has now established a Green Team. It must ensure at this stage that the team is balanced and representative. This team must lead the actions for better environmental practice in the park. A regular date for monthly meetings of Green Team, i.e. *first Monday of every month* is required. A time range should be set on the meeting so everyone knows the start and finishing time. Avoid long meetings.
- Prepare an Environmental Policy in conjunction with the Director / Green Team and display in a highly visible area.
- Identify a suitable Green Notice Board accessible to all of the staff.
- Survey staffs on improvements or actions that they wish to see implemented. Inform staff about your proposed environmental action plan. Ideally provide staff with ten top tips for waste, energy and water management.
- Develop an Awareness Programme i.e. posters, colour coding of bins, signage to maximise segregation and encourage waste prevention energy & water conservation and sustainable merchandise for the souvenir shop.
- Continually advise your visitors and students on environmental initiatives that the park is striving for its Green Flag Award. Their support is required.

## **2.2 Environmental Awareness Programme (EAP).**

The foundation for environmental improvement is the commitment and involvement of all staff that need to understand their role in preventing pollution. Raising awareness of the relevant environmental issues, the cost of waste and energy and the part everyone in the organisation has to play, is an essential first step for a successful waste prevention programme.

### **2.2.1 Objectives of the EAP:**

- Make all employees aware of the objectives of the Fota's programme in working for the Green Flag.
- Seek staff involvement in the programme.
- Explain the need for changes and allow people to contribute fully to improvements.
- Communicate sustainability efforts to the general public and visitors.

### **2.2.2 EAP Actions :**

- a. To ensure that all staff in each area are aware of the waste & energy/water policy changes and why they are being made. Use team meetings and emails to disseminate information.
- b. Post the action plan and figures for the current waste, displays and post new information when available on your Green Board. Make sure this board is in a prominent location of high staff usage.
- c. Organise a survey of staff opinions and suggestions for improvement. Possibly reward the best suggestion. In addition to your environmental mission statement consider an annual green slogan that will appear on all emails correspondence to staff. 'Thread softly on our world' won the Cork County Council's slogan campaign when an Action at Work waste prevention programme was activated. Post poster with specific messages and reminders regarding waste issues.
- d. Organise training to be carried out in-house.
- e. Email staff on any actions, attempts and failings.
- f. Email tips on dealing with certain waste types, both in work and at home.
- g. Sustainability reporting [i.e. signage] throughout the park, to highlight objectives, targets and achievements or performance.
- h. Run programs and campaigns to engage visitors and the general public to take action for the environment when visiting.
- i. Use the Fota Wildlife Park Website for external communication on its programme.
- j. Include sustainability information in presentations and talks to visitors.

### 3 Waste Management Practices on site and recommendations

#### 3.1 Overview

Significant savings can be made by ensuring that waste is managed properly within your business. It is important to identify the quantity and type of waste produced on-site. Once this is done, it is then time to look at your waste and see what can be prevented. All materials suitable for recycling should be segregated at source and bagged or compacted and stored appropriately. Many businesses can save 10% on their waste costs by implementing no cost and low cost waste solutions.

As your business serves food to the general public [albeit contracted out], it is advised that the reduction of food waste should be addressed as a priority. The reduction of organic waste and in particular food waste going to landfill is high priority and strong environmental legislation is in place to ensure that Ireland meets EU requirements. Arising from the waste audits some simple common sense housekeeping procedures should alleviate much of the food waste on site. It is advisable that your hospitality caterer joins the Green Failte Hospitality Award programme. This programme is inexpensive to join and great savings in food waste prevention, energy and water conservation can be made and sustained.

- **Waste** on site is currently managed by Greenstar (who take away the wheelie bins) and Ashton (who take away the skips). There is some recycling, but no facilities for the public to recycle. There is no composting of green waste or leaves and the manure is allowed to sit in a sheltered corner. Following the collection of baseline data and audits, the information should be collated and analyzed.
- **Map of site with the distribution of public bins** – during the walk through the site it was noted that there were a lot of different mixed waste bins. In many public sites this distribution of bins could be changed to ‘waste centers’ where recycling and mixed waste services are together. Branding the waste collection areas and doing something unique to Fota park along with the provision of environmental awareness information could be a good long term consideration. Fota’s waste service providers should provide guidance and support to make this happen.
- Waste characterisation audit was scheduled for and untaken in February 2011 to give an initial assessment of waste types being generated. Details of this audit are in appendix A.

### 3.2 Action Plan on Waste

Develop an action plan [1.3] for at least a 12 month period based on the recommendations below and also based on the findings of the waste audit. This action plan should be prepared for each of the **5 key areas** [restaurants, administrative-educational centre, machinery yard, public areas in the park and car parks] Each action plan should provide a set of objectives and targets, and the steps to take to realise these objectives. The LAPN waste prevention officer will assist the green team with this action plan.

#### 3.2.1 Recommended **initial actions on waste to assist with your action plan.**

- Meet with waste service provider and discuss removing skips and replacing with wheelie bins for different segregated waste streams. Where skips are a necessity, ensure they are covered at all times to prevent water ingress.
- Discuss signage to accompany each waste receptacle. Discuss the 'possibility' of bins for recyclable in public areas.
- Put in place separate food waste collection.
- Investigate the possibility of sending used willow to wood pellet manufacturer

#### 3.2.2 Under general management

Analyse the waste characterisation information supplied by Environmental Awareness & Research Unit. From this data:-

- Check how much cardboard, plastic and other waste you produce – identify what may be preventable.
- Improve segregation and recycling [speak with your service provider] by using clear bags where collection bags are required. Introduce colour coded receptacles for different waste streams and locate at relevant areas. Identify suitable number of waste stations throughout the park in conjunction with the Green Team/management. Have good visible signage at the waste stations. Experience from other projects show that when one person has responsibility for the designated waste area, then the waste station is not neglected abused.
- Maintain records for waste sent off-site – a staff member should verify collection and have estimated / actual weight of each collection recorded.
- Prepare a separate hazardous waste plan. Identify items and safe routes for disposal. Consult the LAPN Waste Prevention Officer in developing this plan.



### 3.2.3 Deliveries

- Ask suppliers to drop supplies at a specified area or areas which can be monitored. Ask them to use returnable packaging. Assign responsibility to this task and monitor regularly.
- Formally review all suppliers asking them how they envisage reducing their packaging.
- Ensure that all pallets / reusable containers are removed of-site by relevant distributors at all times.
- 

### 3.2.4 Kitchen /Restaurants

- In order to ascertain the quantity of food waste arising on site a small study should be undertaken by collecting all food waste separately and weighing it from each of the following 3 areas:
  - kitchen waste (prep waste),
  - leftovers (scrapings from plates) and
  - unserved cooked food (from the kitchen but split from prep waste)
  - This should be done for at least 7 days during a typical week and the weights from each day gathered. This will provide an indication of the amount of food waste typically generated and where in the food management process the majority is coming from. Once this is gathered a more comprehensive understanding of food waste generation will allow for food waste prevention planning to be implemented at source.
    - Look at portion control – too large and it is a waste;
    - Introduce a stock rotation policy;
    - Label and date food in reusable containers;
    - Cut down on food waste by vacuum-packing food;
    - Reuse left-over food where appropriate;
    - All cooked food waste for disposal should be segregated and disposed of in the organic bin;
    - Use of disposable items i.e. single sugar sachet, mayonnaise etc should be kept to a minimum;
    - Ensure all food containers are empty prior to disposal;
    - Review system to determine quantities of food cooked during the day;
    - Ensure the polystyrene vegetable containers and all containers are empty prior to disposal;
    - Delivery of food – encourage the use of reusable delivery containers.

The waste audits identified coffee & soft drinks containers as significant contributor to the volume of waste on site. Serious consideration to compostable cups and food plates is recommended.

Mr James Hogan, senior scientific consultant of Clean Technology Centre will assist Mr Liam Wall, operations manager of Kudos catering with the implementation of these waste prevention steps.

### 3.2.5 Training

- Training which includes awareness campaigns should be provided for all staff on correct waste practices;
- Specific training can be provided for key staff in specific areas.  
Suggest Integrate short trainings into current staff meetings.
- Use the waste hierarchy diagram as illustrated below showing that prevention [top of the hierarchy] is the favoured option. Remember that recycling is only a means of dealing with waste once generated; therefore, it appears midway on this illustration. What is required from Fota staff are objectives and goals to minimise disposal and achieve a high performance in the top three categories of prevention, minimisation and reuse.

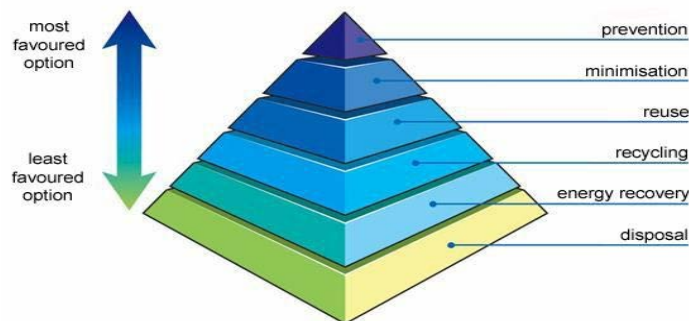


Figure 1 the European Waste Hierarchy

### **3.2.6 Legislation**

- Ensure compliance with all relevant waste legislation. The LAPN Waste Prevention officer can assist you.
- Ensure that all waste collection contractors are permitted.
- Implement a Hazardous Waste Management Programme and monitor and record these actions (fluorescent tubes, batteries).

#### **4. Review Results**

The first phase of the environmental review was carried out on Monday 31<sup>st</sup> January 2010. Please review these results with the LAPN waste prevention officer as a base for all your actions.

In addition to the walk through review and audits, a desktop study was also undertaken by the educational officer examining details of the annual waste arising, energy consumption and water consumption. This was based on invoices available and general information gained from informal interviews with staff on site and service providers.

#### **5. Conclusion**

This report aims to provide you with some of the information required to implement good environmental practices in your workplace that will not only assist in improving your environmental performance, but should also help you to save some money. The report will give you guidance and outline potential actions for environmental improvement which should help you along your environmental journey. Managing your environmental performance means putting systems in place within your business that will allow you and your staff identify areas where excess waste is produced, or where excess energy or water is consumed in the course of your day-to-day activities. Keep in mind that environmental improvements can be achieved by employing best practice techniques as outlined in this report.

All figures used for auditing purposes in this Environmental Review are determined to be as accurate as possible at the time of auditing. This work plan is just a starting point and is not about large investments. It is about starting small, tightening up through better on-site management and in time, when the opportunity is right and value for money can be assured improving things like lighting and tap fittings.



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## APPENDIX A

### Waste Audit Findings

#### Audit 1

From Monday 7 February 2011 to Sunday 13 February 2011 inclusive, waste from the Administration Building, Education Centre, Serengeti Store and Savannah Cafe was collected and put in clear plastic bags. A waste audit was carried out on Wednesday 16 February 2011. The exact breakdowns of different waste types in each waste stream can be viewed in the attached spreadsheet, *Fota Waste Audit 1.xls*. Tables 1- 4 and Figures 1-8 show the results of this survey.

#### Administration Building

	Mixed	Segregated	Total
Paper	1.0	0.0	1.0
Cardboard	0.0	0.0	0.0
Glass	0.0	0.0	0.0
Plastic	0.4	0.0	0.4
Metal	0.0	0.0	0.0
Organic	1.2	0.0	1.2
Textiles	0.0	0.0	0.0
Wood	0.0	0.0	0.0
Composite	0.2	0.0	0.2
Special	0.4	0.0	0.4
Total	3.2	0.0	3.2

Table 1: Actual Weight Data for One Week from Admin Building

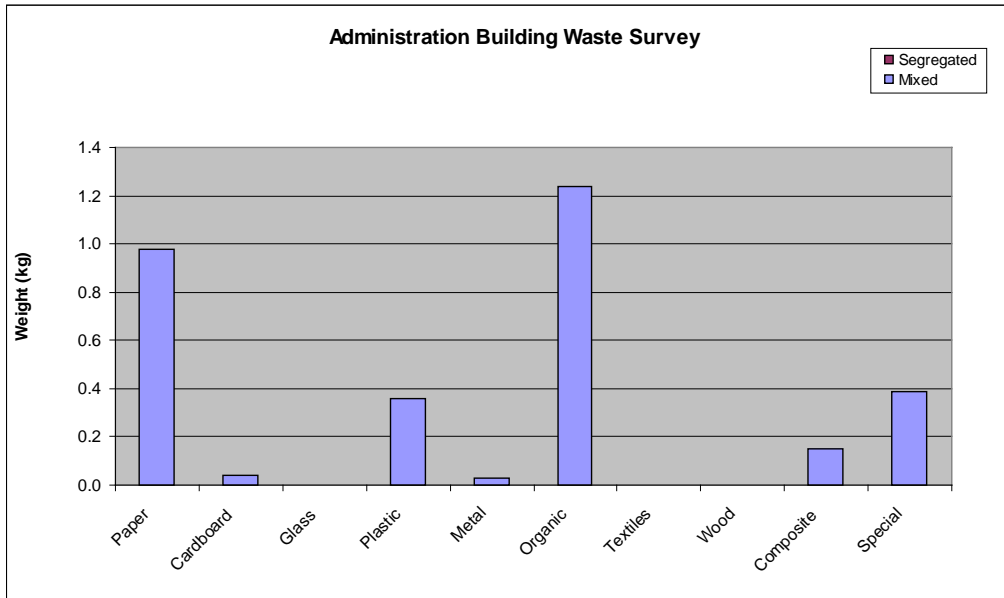


Figure 1

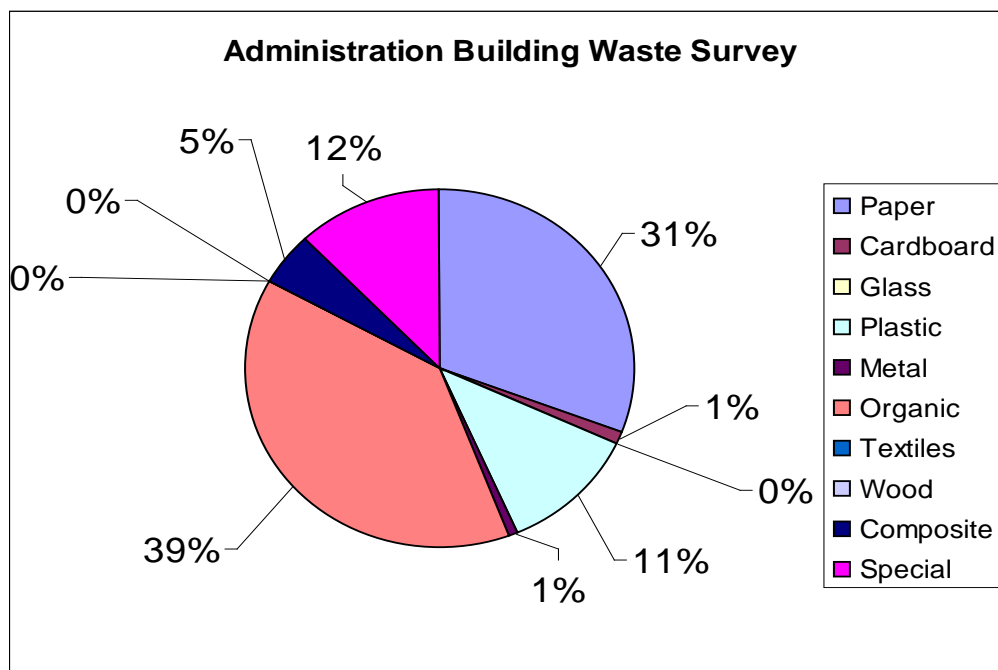


Figure 2

### Observations:

- Only two bags of waste were generated for one week, a total of 3.2kg.
- There is no segregation of waste in the Administration Building.
- Most of the Office paper waste consisted of administration slips on daily charges/patron entry. Consideration should be given on how to

minimise waste from this source. Do all receipts need to be printed?  
All office paper should be recycled.

- Confidential papers were observed during the audit. This documentation should be shredded and sent for recycling. Various companies provide this service or alternatively, the shredding could be carried out in-house.
- Approximately 40% of the waste generated from the Administration Building consists of food waste. The food waste should be kept separate from all recyclables. Consideration should be given to recovering this waste type at source or at another authorised treatment facility. Kitchen Caddies should be used to collect food waste in the staff kitchen.
- In order to ensure maximum recovery of recyclable materials and to prevent contamination, consideration should be given to providing recycling bins in the Administration Building.
- Recyclable food containers should be cleaned prior to disposal of the container.



## Education Centre

Waste Stream	Mixed	Segregated	Total
Paper	0.1	0.0	0.1
Cardboard	0.0	0.0	0.0
Glass	0.0	0.0	0.0
Plastic	0.1	0.0	0.1
Metal	0.0	0.0	0.0
Organic	0.1	0.0	0.1
Textiles	0.0	0.0	0.0
Wood	0.0	0.0	0.0
Composite	0.0	0.0	0.0
Special	0.2	0.0	0.2
Total	0.5	0.0	0.5

Table 2: Actual Weight Data for One Week from the Education Centre

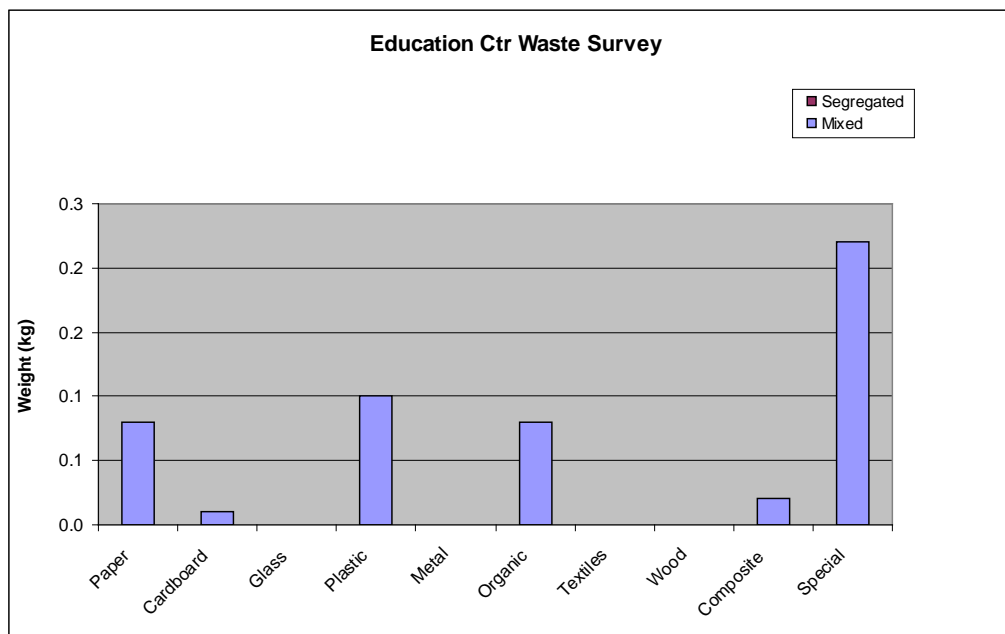
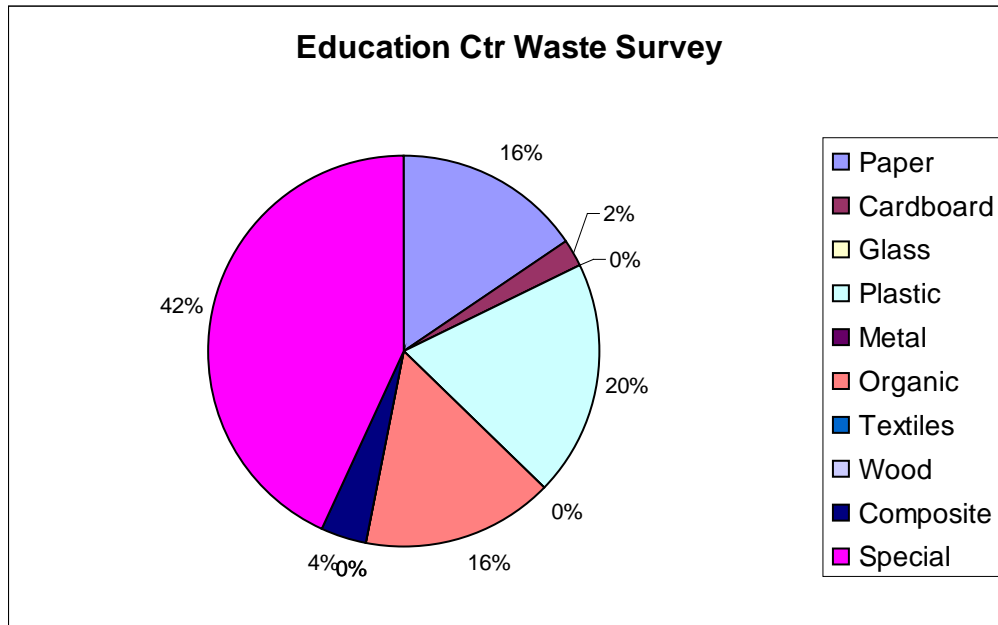


Figure 3



**Figure 4**

**Observations:**

- Only one bag of waste was generated for one week, a total of 0.5kg.
- There is no segregation of waste in the Education Centre.
- 42% of the waste was special waste, which consisted of Rubber Gloves, CPR mouthpieces from a First Aid Course, which is not representative of the typical waste types that would be generated in the Education Centre.
- The other main waste types consisted of office paper, particularly paper packaging, plastic packaging from food and also waste food.
- Recycling bins should be provided in the Education Centre.
- Contaminated recyclable food containers should be cleaned and deposited in the recycling bin.
- Consideration should be given to recovering food waste at source or at another authorised treatment facility. A kitchen caddy should be provided and used in the staff kitchen to keep all food waste separate from other waste types.

## Serengeti Store

	Mixed	Segregated	Total
Paper	2.0	0.0	2.0
Cardboard	30.0	0.0	30.0
Glass	0.0	0.0	0.0
Plastic	0.4	0.0	0.4
Metal	0.0	0.0	0.0
Organic	0.8	0.0	0.8
Textiles	0.0	0.0	0.0
Wood	0.0	0.0	0.0
Composite	0.1	0.0	0.1
Special	0.1	0.0	0.1
Total	33.5	0.0	33.5

Table 3: Actual Weight Data for One Week from Serengeti Store

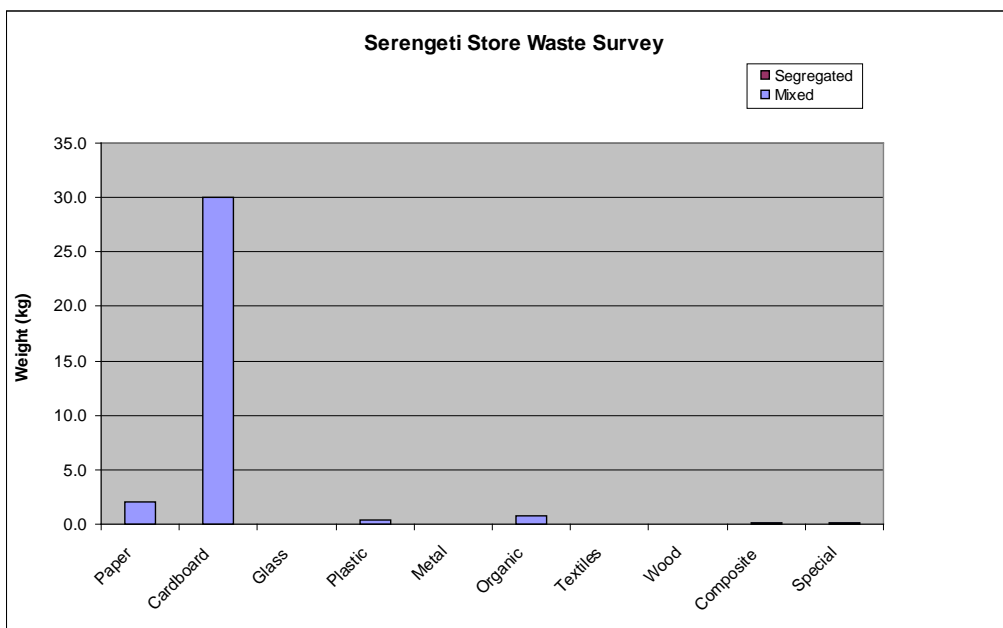
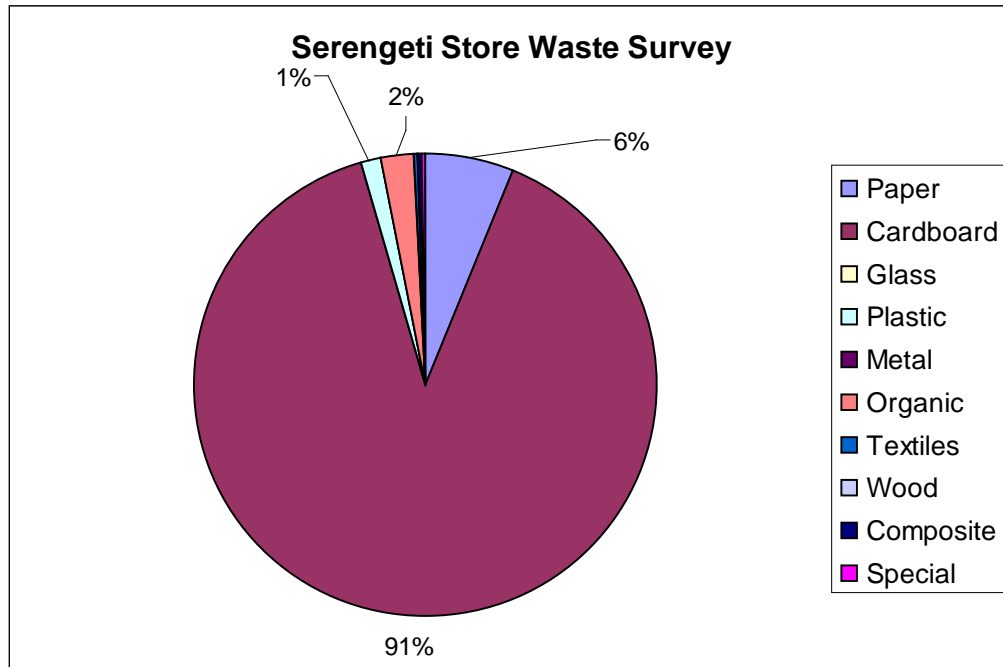


Figure 5



**Figure 6**

**Observations:**

- Cardboard packaging is the only waste that is segregated.
- 33.5 kg of waste was generated from the Serengeti Store for one week.
- 91% of the waste consisted of recoverable cardboard packaging. All cardboard packaging should be kept dry and recycled. However, the possibility of returning packaging to the supplier or using reusable packaging (plastic crates) should be investigated.
- Consider buying in bulk to reduce packaging waste.
- The total quantity of cardboard packaging does not necessarily reflect one week of deliveries as staff indicated, on the day of the waste audit, that some cardboard may have been stored in the Serengeti Store from deliveries prior to the Audit Survey Week. However, efforts do need to be made to reduce the quantity of packaging waste.
- The remaining waste consisted of mainly office paper, such as unfinished receipt rolls, newspapers and tissue paper. Disposal of unfinished receipt rolls should be avoided if possible.
- A small quantity of food waste was also observed.
- Recycling bins should be provided to segregate all recyclables.
- Set up purchasing targets for local sustainable products to sell in the shop.

## Savannah Café

	Mixed	Segregated	Total
Paper	1.5	0.0	1.5
Cardboard	0.8	0.0	0.8
Glass	0.0	0.0	0.0
Plastic	1.5	0.0	1.5
Metal	0.0	0.0	0.0
Organic	11.5	0.0	11.5
Textiles	0.0	0.0	0.0
Wood	0.1	0.0	0.1
Composite	0.9	0.0	0.9
Special	1.1	0.0	1.1
Total	17.4	0.0	17.4

Table 4: Actual Weight Data for One Week from Savannah Cafe

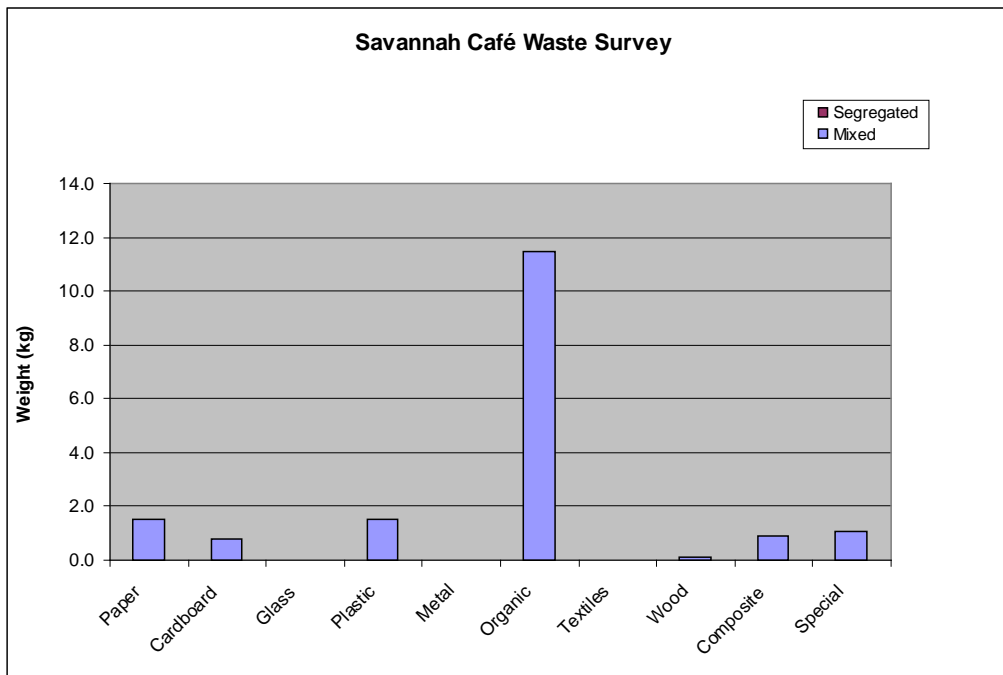
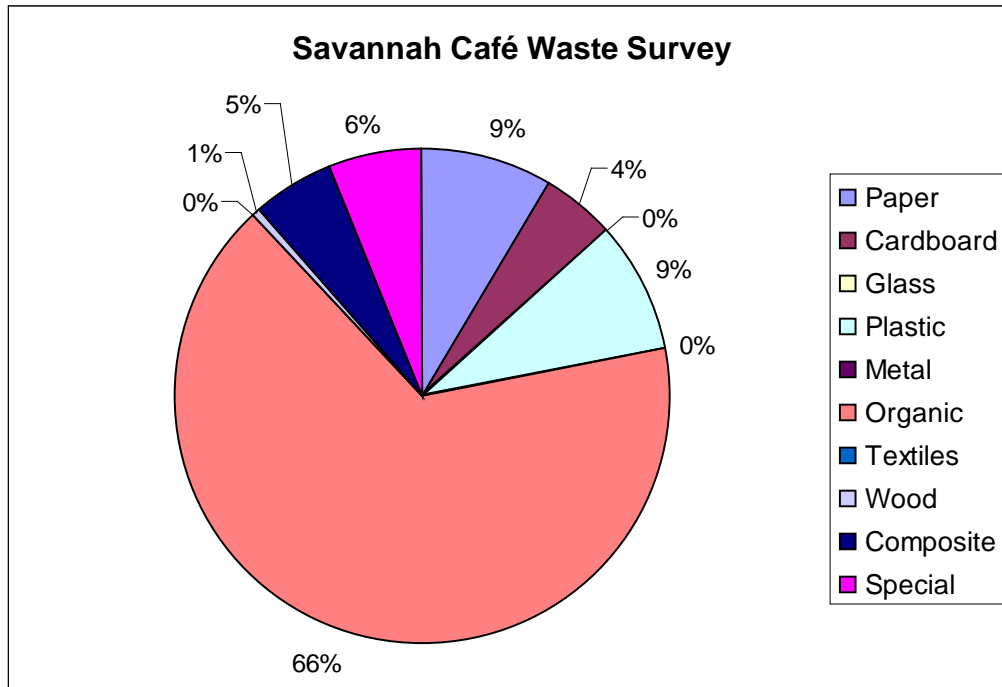


Figure 7



**Figure 8**

**Observations:**

- 17.4 Kg of waste is generated, at the Savannah Café, in one week.
- No waste is segregated.
- 66% of the waste consists of food waste, which includes, waste from the kitchen and plate scrap waste.
- Some of the food waste includes uneaten single portion savoury tarts, sandwiches, open and unopened single portion condiments, uneaten scones and coffee grinds.
- Unused, near out of date, food is being disposed of. Consideration should be given to permit staff to take food, without charge or at a reduced rate, which is nearly out of date. This food could be used for staff lunches or taken home. This would significantly reduce the amount of food waste being generated and would reduce the disposal costs associated with food waste.
- The use of single portion condiments should cease. Single portion condiments result in the excessive use of condiments, as the full portion may not be used or unopened condiments may be left by the customers and thrown out. Single portion condiments also create unnecessary packaging waste. Use refillable bottles or dishes instead.
- All food waste should be segregated at source, collected separately and sent for recovery at an authorised treatment facility.
- Used tea, coffee & soft drink disposable cups is a significant portion of the waste generated at the Wildlife Park in terms of volume and

currently this waste type is going straight to landfill. One option is to use compostable cups. These cups could then be deposited in the food waste bin and sent to an authorised treatment facility and diverted from landfill.

- Consideration should be given to using compostable food service supplies, such as plates, cutlery, napkins etc.
- Review 'Less Food Waste More Profit, A Guide to Minimising Food Waste in the Catering Sector'. This guidance document, which was published last year, is an excellent resource to assist the commercial/catering sector to prevent food waste and reduce costs.
- Include catering tenant on the Green Team.
- Minimum Environmental Criteria should be included on the renewal/new Tenant Lease Agreement.

## Audit 2

From Monday 21 February 2011 to Sunday 27 February 2011 inclusive, waste from the Oasis Café, Park Public Bins, and Car Park was collected and put in clear plastic bags. A waste audit was carried out on Thursday 03 March 2011. The waste collection for the audit was carried out during School Midterm, so the waste generation levels would reflect the summer period.

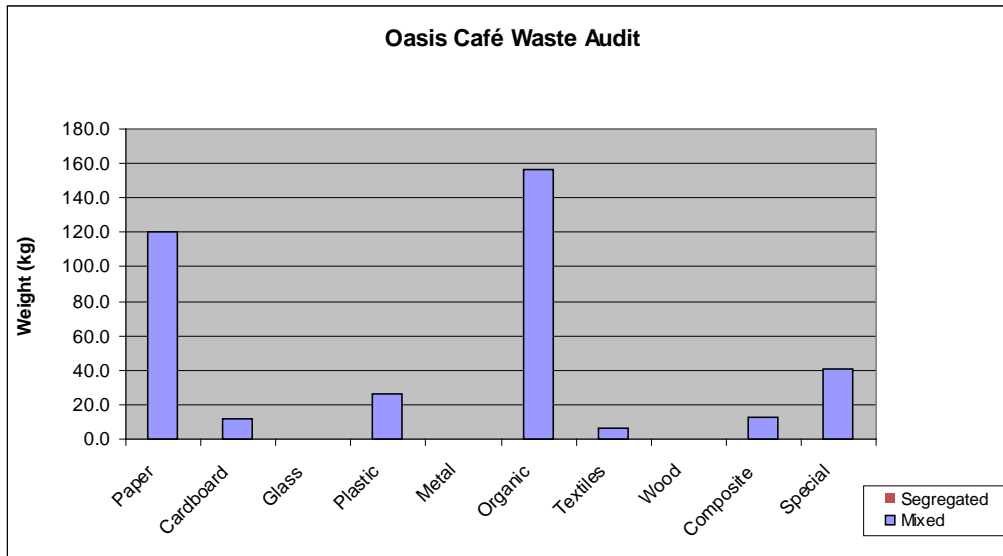
A fraction of the waste collected was inspected in detail and the results were scaled up to represent all the waste collected. The exact breakdowns of different waste types in each waste stream can be viewed in the attached spreadsheet, *Fota Waste Audit 2.xls*. Tables 5 – 7 and Figures 9 - 14 show the results of this survey.

### Oasis Café

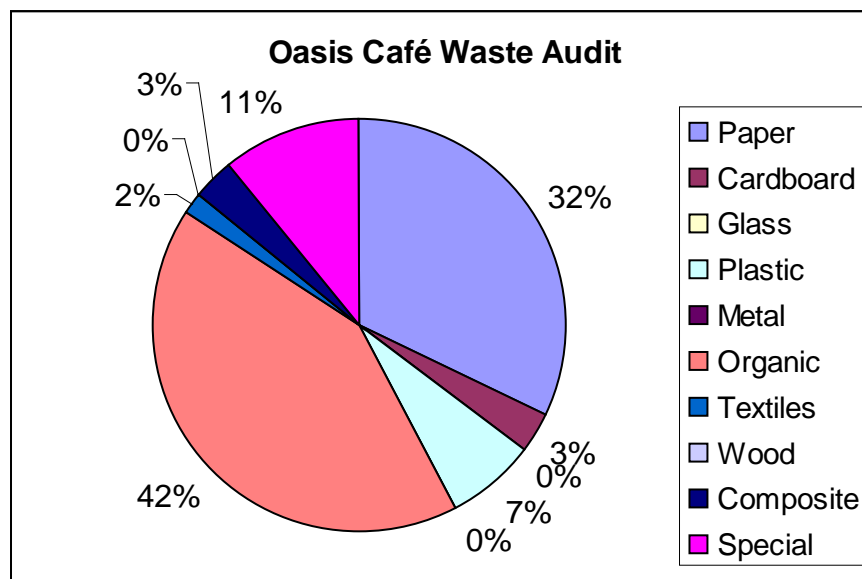
	Mixed	Segregated	Total
<b>Paper</b>	120.6	0.0	120.6
<b>Cardboard</b>	11.6	0.0	11.6
<b>Glass</b>	0.0	0.0	0.0
<b>Plastic</b>	26.2	0.0	26.2
<b>Metal</b>	0.0	0.0	0.0
<b>Organic</b>	156.7	0.0	156.7
<b>Textiles</b>	6.0	0.0	6.0
<b>Wood</b>	0.0	0.0	0.0
<b>Composite</b>	12.3	0.0	12.3
<b>Special</b>	40.8	0.0	40.8
<b>Total</b>	374.1	0.0	374.1

**Table 5: Actual Weight Data for One Week for Oasis Cafe**





**Figure 9**



**Figure 10**

**Observations:**

- 374.1 Kg of waste was generated in one week at the Oasis Café.
- There is no waste segregation at the Oasis Café.
- 42% of the waste consisted of food waste. The food waste is both kitchen waste and plate leftovers from customers.
- Unused food from the kitchen is being disposed of such as full bags of lettuce, half full bags of frozen chips, uneaten burgers, sausages and chicken breasts.

- All food waste should be segregated at source, collected separately and sent for recovery at an authorised treatment facility.
- 32% of the waste consists of tissue paper, in particular the blue hand towel/kitchen roll paper. The bulk of this waste type comes from the toilet bins. Consideration should be given to replacing hand towels with energy efficient hand dryers.
- Other waste includes unused coffee cups and lids and unfinished rolls of toilet roll. Staff awareness should address some these issues.
- Review 'Less Food Waste More Profit, A Guide to Minimising Food Waste in the Catering Sector'. This guidance document, which was published last year, is an excellent resource to assist the commercial/catering sector to prevent food waste and reduce costs.
- Include catering tenant on the Green Team.
- Minimum Environmental Criteria should be included on the renewal/new Tenant Lease Agreement.

## Public Park Bins

	Mixed	Segregated	Total
Paper	1.7	0.0	1.7
Cardboard	3.2	0.0	3.2
Glass	0.0	0.0	0.0
Plastic	7.1	0.0	7.1
Metal	1.6	0.0	1.6
Organic	25.3	0.0	25.3
Textiles	7.7	0.0	7.7
Wood	0.0	0.0	0.0
Composite	7.3	0.0	7.3
Special	35.4	0.0	35.4
Total	89.3	0.0	89.3

Table 6: Actual Weight Data for One Week from Public Park Bins

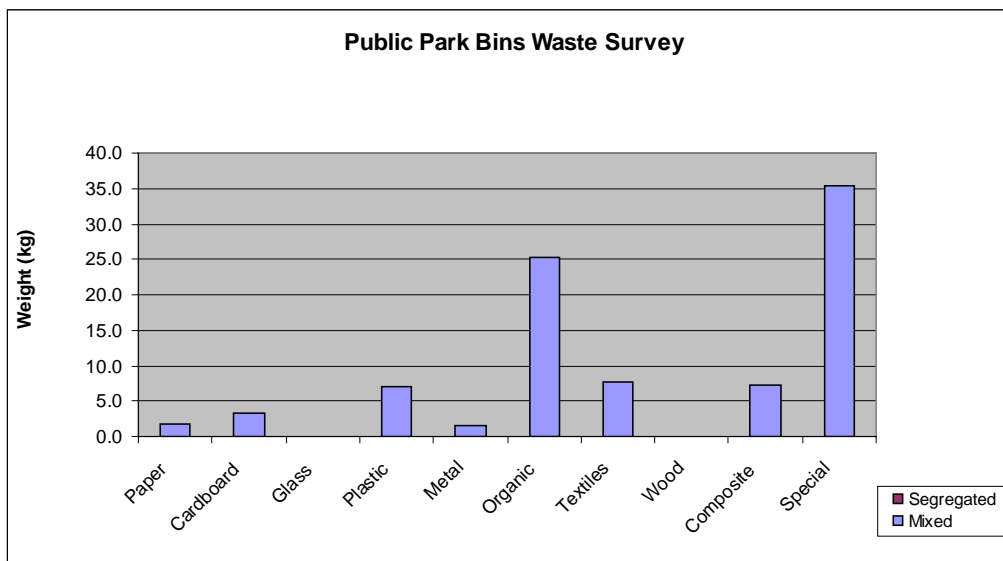
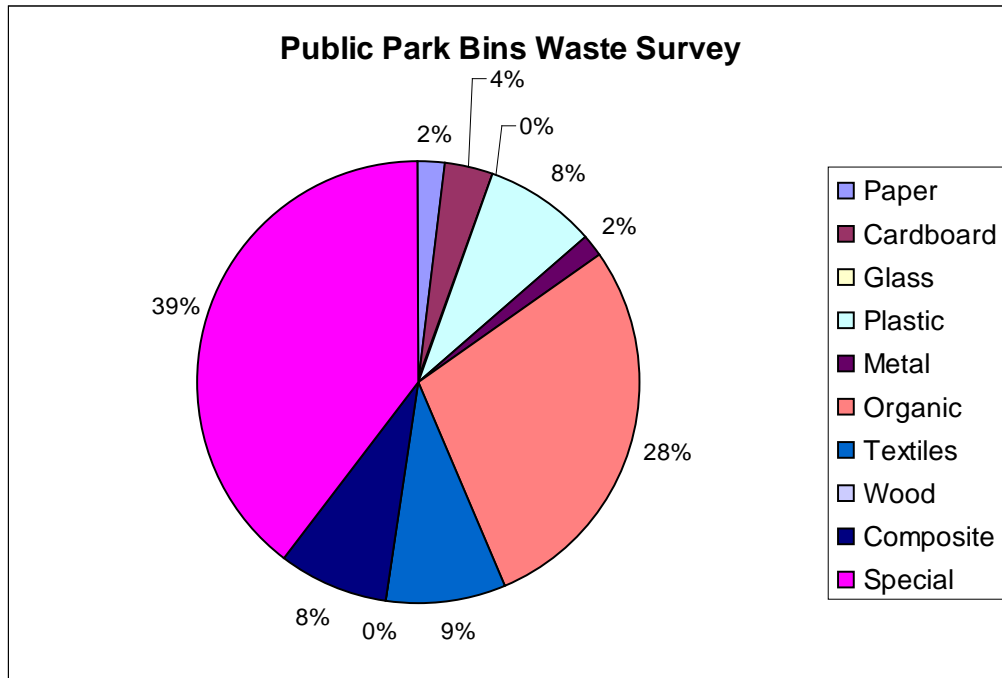


Figure 11



**Figure 12**

**Observations:**

- 89.3 Kg of waste was generated in one week from the Public Park Bins.
- There are no recycling facilities for the public.
- 39% of the waste consisted of Coffee Cups (67%) and baby wipes (33%). Large quantities
- 28% of the waste consisted of food waste. It is predominantly food leftovers from the public. This includes food which had been purchased at the park but also food that was brought in by the patrons.
- The 9% textiles consist completely of used nappies.
- 8% of the waste consists of plastic such as plastic drink bottles, coffee cups lids and other plastic packaging.
- Another 8% of the waste consists of composite packaging such as tetra-pak, confectionary packaging and single portion milk containers.

## Car Park Bins

	Mixed	Segregated	Total
Paper	7.1	0.0	7.1
Cardboard	2.1	0.0	2.1
Glass	0.0	0.0	0.0
Plastic	5.9	0.0	5.9
Metal	0.5	0.0	0.5
Organic	7.4	0.0	7.4
Textiles	26.0	0.0	26.0
Wood	0.0	0.0	0.0
Composite	10.5	0.0	10.5
Special	12.7	0.0	12.7
Total	72.3	0.0	72.3

Table 7: Car Park Bins Actual Weight Data for One Week

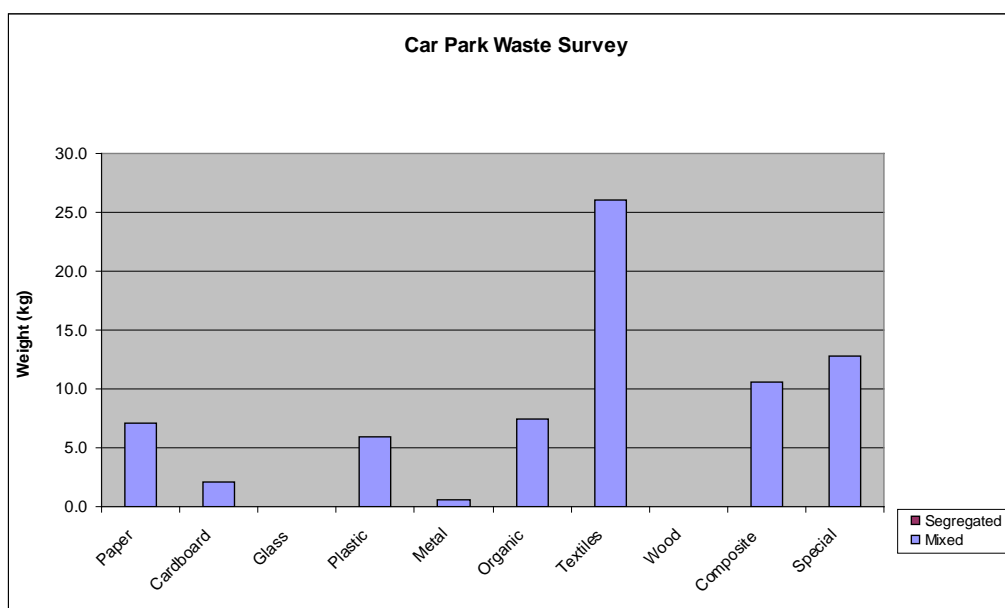


Figure 13

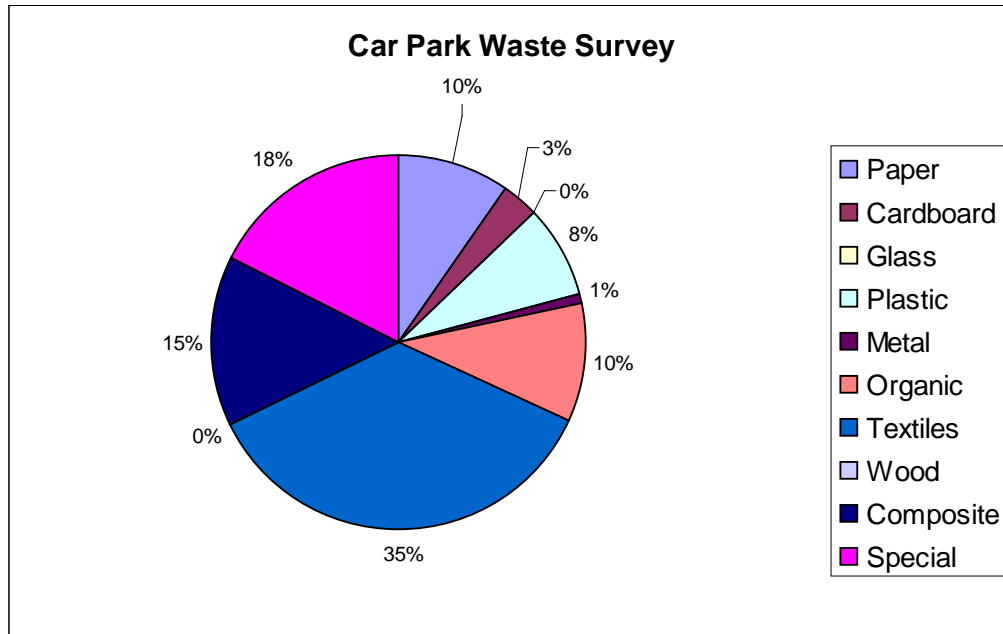


Figure 14

#### Observations:

- 72.3 Kg of waste was collected in the car park bins during one week.
- There are no recycling facilities for the public in the car park.
- The bins are covered but rainwater does get into the bins. Therefore the waste is wet and this adds to the weight of the waste.
- There was evidence that people are dumping domestic waste in the car park bins. E.g. waste from a fast food outlet was found during the waste audit. Small bags of household rubbish were found during the waste audit. Some Patrons possibly take the opportunity to clean out the rubbish in their cars and deposit it in the car park bins.
- 35% of the waste consisted of used nappies (textiles).
- 18% (special) of the waste consisted of coffee cups (25%) and residual wet portion (75%) of the waste.

## Appendix B

### Photos of audit



*Waste is separated into different streams, weighed and photographed.*



*Coffee Cups were a significant feature in all waste areas*

## Oasis Cafe

### Main items to consider



*Unused Food Wasted – Frozen Chips*



*Full bag of lettuce*



*Clean unused cups and lids*





*Cooked Food Waste*



*No Segregation*

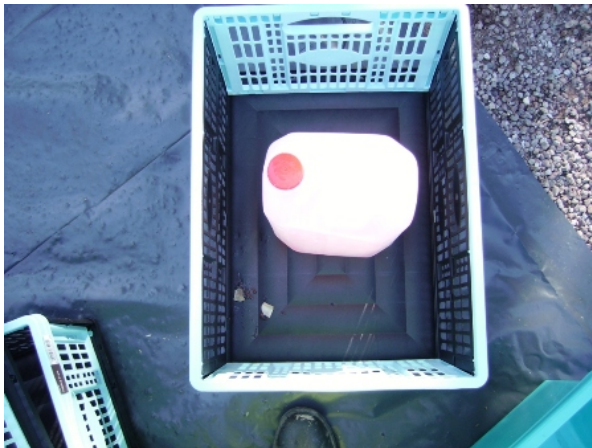


*Missed Recycling Opportunities*

## EXTRA items that can be recycled



*Toilet rolls can be recycled*



*Rinse out plastic containers and recycle*



*Watch out for excessive waste. Replace paper towels with hand driers*



*More tissues from toilets*



*Lost Property: Possible link with Local Charity?*

IFT SHOP FLOAT		
	Euro	Cent
€ 20.00	40	
€ 10.00	40	
€ 5.00	60	
€ 2.00	50	
€ 1.00	75	
.50c	25	
.20c	10	
.10c	10	
.05c	5	
.02c	2	
.01c	1	
	318	

Fota Wildlife Park			
Tel. 021 4812 678 Vat No. 459 745 4K			
3 Member (Adult) Con			
@ 0.00 Each	0.00		
2 Memb (Child) Cons			
@ 0.00 Each	0.00		
1 Member (Ch <3) Con	0.00		
3 BAL DUE	0.00		
CASH	0.00		
CHANGE	0.00		
Vat Rate	Excl.	VAT	Incl.
You have been served by Karen Murph			
22 R00765595 07	14:23	13/02/11	
Thank You. Enjoy			
Your Visit. Please			
Retain Your Receipt			

Excessive paper waste could be reduced in shop & admin centre.