



Local Authority Prevention Network Programme

Case study IV.

Sector: Recreational & Tourism, East Cork.

Partner: Cork Co. Council, EPA, Fota Wild Life Park

Project aims

Fota WLPL is a significant national tourist attraction. It is a participant in the EPA's local authority waste prevention programme [LAPN] since December 2010. Through this programme Fota aims to manage & operate this popular public attraction in a sustainable manner and the carbon footprint of the park can be minimised.

Policies & Practices to Prevent Pollution

Fota recognises that effective environmental management of its operation is a critical element in achieving its mission and believes that all activities should be undertaken with minimal adverse impact on the local environment.

As leaders in animal care & wildlife conservation with global recognition [educational institute awards for conservation] Fota is committed to forward-thinking with sustainability as the key lever to long-term success and performance.

Objectives

The LAPN programme identifies work practices in the daily operations of the park that not only eliminates any negative environmental impact, but also has resulted in national recognition for of its environmental performance via the EcoCampus Green Flag programme.

Fota as a participant of LAPN programme

Fota Wildlife Park is an independently funded, not-for-profit charity that is also one of the leading tourism, wildlife and conservation attractions in Ireland. Fota Wildlife Park is set on 70 acres on the scenic Fota Island in the heart of Cork Harbour only 15 minutes from Cork City. Over, 400,000 visitors visit every year. The public's footfall places a strain on this wonderful natural habitat. Fota Wildlife Park is committed to reducing its carbon footprint by reducing its energy, waste and water consumption in the day to day operations.

The local authority prevention of waste network [LAPN] demonstrates that this sector of business can operate in a positive manner and reduce environmental impacts. Fota's operations are assessed to determine the impact on the environment. Where necessary changes to operational procedures are implemented to prevent & eliminate waste.

Why businesses require pollution prevention & sustainability programs?

Businesses have corporate responsibility to manage their activities with minimum impact on the local & global environment. Fota's staffs knowledge & skills are boosted through internal & external educational & awareness programmes. This is leading to proficient confident staff capable of implementing sustainable practices on site. Environmental considerations are at the core of Fota's corporate strategy.



Dr Mary Stack pictured at the launch of Green Zone, in Fota Wildlife Park.

Initial environmental assessment

Walk through eco-mapping in December 2011 identified:-

1. No significant recycling or waste minimisation practices in place.
2. No environmental awareness signage.
3. Lacking in public display of rules or any restrictions preventing negative environmental practices.
4. No conservation on controls in water consumption.
5. Characterisation study of waste assessment not done.

Information gathering

Waste audits & characterisation studies February-April.
 Water consumption assessment of previous years [March –May].
 Water flows measured on all indoor & outdoor taps.

Findings

Car Park Waste.

Found to be a significant contributor to the waste burden.
 Public can bring picnics on site resulting in various waste streams.
 Nappy waste is significant in weight terms
 Some illegal dumping.
 No recycling or food waste bins.

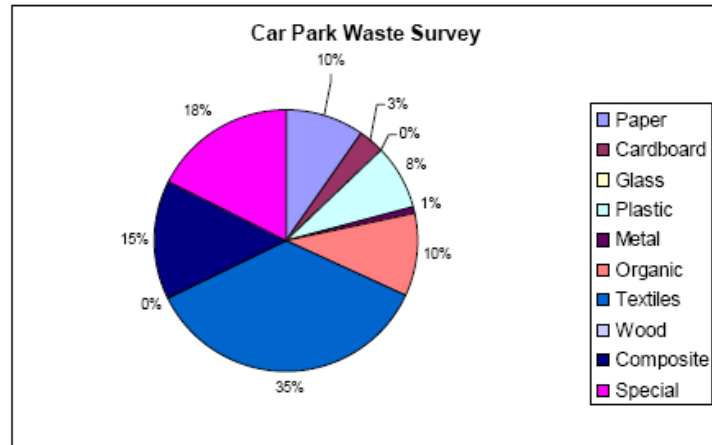


Fig. 1 Distribution of car park waste - 10 categories.

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, which 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.

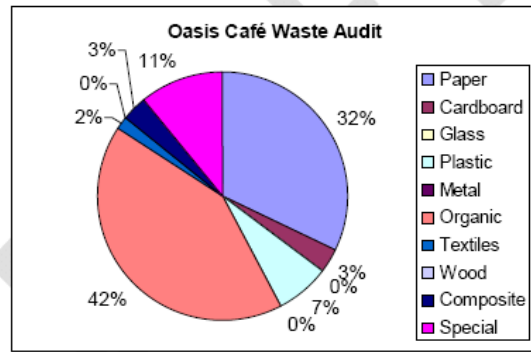


Fig. 2 Distribution of cafe waste - 10 categories.

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.

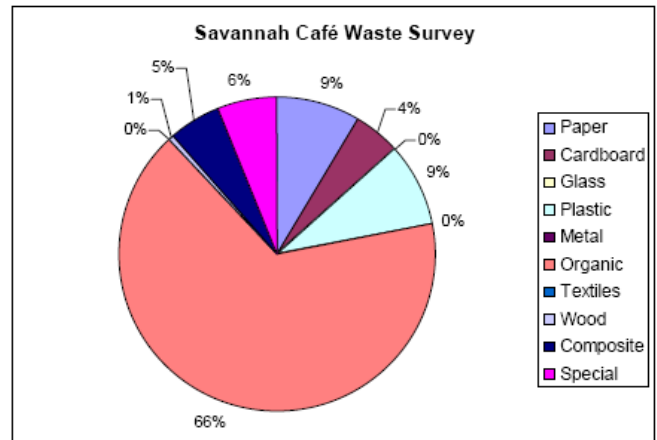


Fig. 3 Distribution of restaurant waste - 10 categories.

Observations:

- 17.4 Kg of waste is generated, at the Savannah Café, in one week.
- 66% consists of food waste from kitchen /plate scraps. No waste is segregated.
- Uneaten single portions - savoury tarts – sandwiches - single portion condiments. Unused, near out of date, food is being disposed of.
- Used tea, coffee & soft drink disposable cups is a significant portion of the waste generated.



Photo. Waste collected for characterisation.



Photo. New waste & recycling bins in green zone areas




Receipts to the public now reduced in both entrance gates & souvenirs shop.

Table 1. Waste minimization changes education centre & souvenir shop

Fota's Education Center Waste Prevention Measures
All correspondence is facilitated by phone or email.
Applications for courses are online.
Reusing envelopes for inter-office communications.
Reusing scrap paper- collections points located by fax/ photocopiers.
Students participating in formal education programmes are encouraged to reduce potential waste th into the centre.
Any food –organic waste is composted.
Cardboard packaging is reused in the education centre art & craft activities.
Friday is Environment Day summer course for pupils.

Table 2. Waste minimization in catering areas

 Catering
IN-Biodegradable coffee / drinks cups.
IN-Bio-degradable plastic cutlery .
IN- Biodegradable packaging for food – some exceptions.
IN-Local suppliers contracted where possible.
IN-Composting organic waste.
OUT-is polystyrene food packaging.
OUT-UT milk cartons.
OUT-Individual salt & pepper sachets
OUT-Receipts for purchase [only on request]
OUT-Confectionery is supplied free of individual packaging.
Suppliers requested to minimise packaging.
Suppliers requested to provide reusable & returnable packaging.
All plastics / cardboard are being recycled, cardboard is bailed .

Animal Husbandry

Bare tree branches [post feeding] are chipped & used as a bedding material for large hoofstock.

Any organic food waste from animal exhibits is composted.

Unsold photographs taken of public are shredded & used as animal bedding.

Animal diet suppliers collect & remove pallets.

Plastic bottles and cups are reused as environmental enrichment toys for primate species

Visitors to Fota Reduce Your Footprint

Travel to the Park by train or share a car with family and friends.

Check out the 3 Green Zones on arrival.

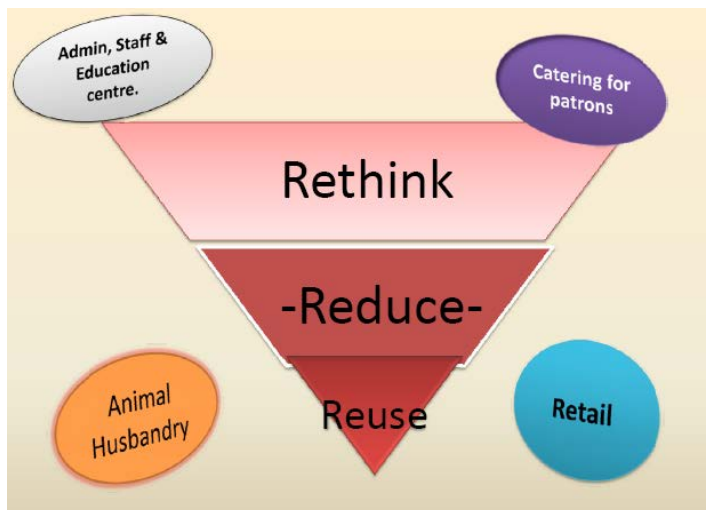
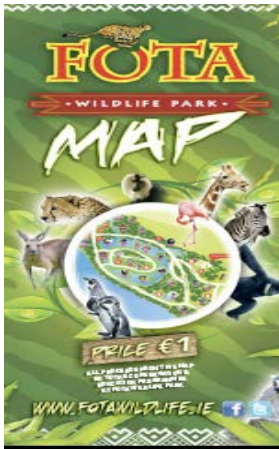
Eat the food you buy, use compostable food ware provided.

Make sure to put your rubbish in the right bin.

Throw away as little as possible.

Minimise your use of disposable items within the Park.

Fota site maps can now be downloaded from website or mobile phone app.



SUMMARY

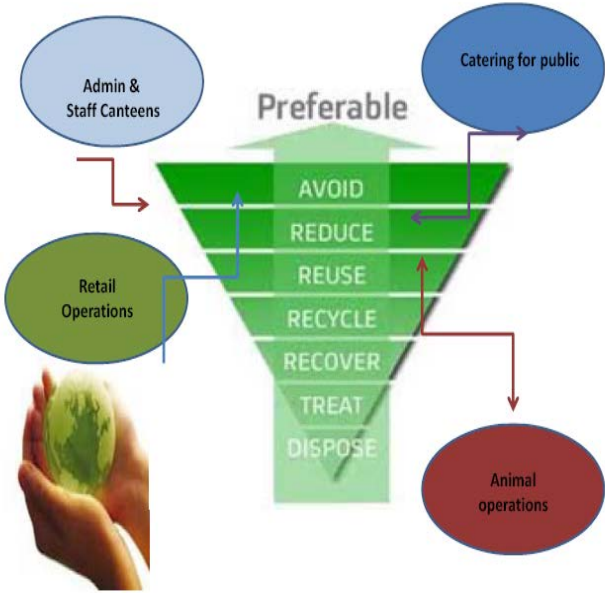
The greening of Fota initiative is just one of many similar initiatives developed under the Environmental Protection Agency [EPA] national Local Authority Network Waste Prevention Programme [LAPN]. The EPA offers both grant aid & technical expertise. This in turn supports local authorities in tackling the challenge of waste prevention and resource efficiency in partnership with businesses, public organisations and communities in County Cork.

More information on this initiative is available on request.

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The advisor role of the Clean Technology Centre in the implementation of LAPN is acknowledged. Special appreciation to the Director of Fota WLP Sean Mc Keown & Education Officer Ms Lynda Mc Sweeney Walsh for their support.



Assisting Fota Wildlife Park in making the park environmentally sustainable in the day to day operations may not be an obvious assignment for a Cork County Council employee. However, Dr Mary Stack Environmental Awareness Officer confirms, that such actions are exactly what local authorities encourage & support in the implementation of their regional waste management plans.

Fota Wildlife Park is set on 70 acres on the scenic Fota Island in the heart of Cork Harbour only 15 minutes from Cork City. Across the world, zoos are being greened through reducing the potential for any negative impacts on the local environment. As over 400,000 visitors visit every year, the public's footfall while welcomed places a strain on this wonderful natural habitat. Fota Wildlife Park is committed to reducing its carbon footprint by reducing its energy, waste and water consumption in its day to day operations.

There are three green zones in the park with recycling bins and the public will now have the facility to recycle any waste they accumulate during their visit to Fota. The Fota Education team, led by Lynda McSweeney, Head of Education at Fota, was on hand together with Dr Stack on Saturday 16th June last launching the initiative and highlighting their Going Green message to visitors. There were lots of fun with green themed activities for kids on the day. Dr Stack says 'it is a great example of how the Council & business can work together and improve our environment through sustainable tourism'.

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Since 2008, Cork County Council is to the fore in implementing sustainable practices both across its own organisation and in assisting local businesses. Cork County Council has a strong commitment to waste prevention and through its participation in the Network is well placed to meet any commitments likely to arise from European and national policies.

The LAPN programme in Cork has already successfully greened the Council's Swimming pools, Fermoy, Mallow, Cobh & Dunmanway, trained numerous small businesses in waste prevention, water conservation and diversion of food waste from landfill. The programme was extended in 2010 to assist public offices & public buildings in east Cork, introducing environmental improvements in Town Councils and libraries. Waste and water conservation audits underpinned the action at work program generated for each building with staff trained and made aware of their role in reducing the Councils carbon footprint.

In addition, community groups such as Midleton Food Festival & Midleton Tidy Towns have successfully greened their street festival in both 2010 & 2011. Consultation, advice & assistance was given to the traders, festival organisers & local town council staff over a two festival period. In August 2012, Cobh Town Council working in partnership with Cobh Tidy Towns will green the Cobh Regatta,

The LAPN group have now developed event guidelines (2012) for Locals Authorities & event organisers stemming from experiences in Midleton, the Dungarvan & Dingle Food Festival, Galway Oyster Festival, greening the Cliffs of Moher and Cavan Fleadhcheoil.

Two marina's in West Cork are also participating in the programme.

In conclusion, the LAPN network is a key component in building capacity in local authorities for the promotion of resource efficiency and waste prevention at a local and grassroots level for the benefit of their localities.

Fota launched its Green Zone initiative in 2012 - aiming to reduce, reuse and recycle waste being produced in the Park.

As leaders in wildlife conservation and animal care, Fota Wildlife Park takes its responsibilities towards the environment very seriously and is committed to leading by example of the area of recycling and waste management.

The introduction of a series of sustainable practices at the Park since the beginning of 2011 has seen the volume of waste being sent to landfill reduced by over two thirds. Recycling rates have soared following the creation of three Green Zones for visitors and food waste from the cafes and restaurant is now separated out and used for composting.

Visitors coming to Fota Park can also play their part, and in showcasing the very latest in sustainable practices the staff is hoping to inspire Green initiatives in homes and work places across Ireland.

Reduce your footprint:

- Travel to the Park by train or share a car with family and friends
- Minimise your use of disposable items within the Park
- Eat the food you buy and dispose of any leftovers appropriately
- Throw away as little as possible
- Make sure to put your rubbish in the right bin. Three Green Zones have been created (outside the Coffee shop, outside the Oasis café and by the Main Entrance), so take a moment or two to help protect your environment.
- Remember whether it's at home or work – Reduce, Reuse and Recycle.

Reusing materials reduces the need to destroy even more of the world's wetlands, forests and rivers. Recycling also requires far less energy and uses fewer natural resources so every effort will help to make a difference.

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Useful Links

- **Education**
Learn about the world around us through Fota's courses and Activity Camps
- **Conservation**
Learn about Fota's role in preserving habitats and species around the world
- **Come See our Animals**
Get up close to amazing animals and birds from all five continents

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Month	Recyclable Tonnage	Non-Recyclable Tonnage	Recyclable Rate %
April			
May			
June	5.64	5.30	*50%
July	1.269	4.104	24%
August	3.230	5.508	37%
September	0.873	2.007	30%
October	1.866	1.494	56%
November	0.839	1.339	39%
December	0.800	0.112	88%
January	0.680	1.203	56%
February	0.790	1.402	36%
March	3.218	1.718	65%
April	1.694	1.612	51%
TOTAL	20.899	25.799	44%

- Please note that a further breakdown was unavailable from Greenstar