

NAZF Green Action Plan 2011

i) Awareness of success of current measures and areas of business for attention during the 2011 Season

After recent implementation of several high-profile new sustainable measures for 2009 at Noah's Ark (incl. a 15kW Wind Turbine and substantial development of the Reedbed Waste Management System) our team have recognised the movement towards greener measures within our business, the positive effects both environmental and financial this can have, and the scope for growth in this area.

We identified several areas to focus on for the next business year, particularly drawing attention to the potential for aiming efforts more directly at our Visitors, both in terms of green-based incentives and also marketing in its various guises.

ii) Key areas of green focus identified for 2011

a) Visitor environmental impact- alleviations and incentives

- Secure public bicycle shed
- Encouraging use of sustainable transport amongst our visitors and staff through on site signage, displays and our website.
- Financial incentives (lower ticket prices) for those using green/public transport
- Greater car park signage and staff patrol to encourage thoughtful reduction of fume emissions whilst using our public rights of way
- Increase number of recycling points for use particularly during the summer period

b) Green education, marketing and building relationships

- Educational workshops centering on sustainability and environment, including discussion of methods used at our site
- Further marketing of our green credentials
- Further publishing relevant green information on our website
- Establishing more environmental contacts for sharing of advice and ideas and technical information

iii) Commitment to look at further projects and installations to cut energy demands, monitor energy usage and reduce waste.

We realise the importance for future investment where possible and particularly the need to further manage our energy usage, in all its various forms in a business where all are in differing demands by both our visitors and our staff.

Key Measures: Projects/Green Practises currently in operation at NAZF

Reed-bed Waste Management

An innovative, natural waste filtration system using a large reed-bed to remove organic waste matter from animal effluent (Tigers and Tapirs) and leave clean water in the final collection pond. A specialised, technical project undertaken by our Grounds staff with expertise gained from an RSPB credited reed-bed waste management course.

Rain-water harvesting

An extensive linkage of water-butts and roof-top drainage piping collects thousands of litres of rainwater per year- used around the farm and Zoo.

Three-way recycling bin system

Compartmentalised, three way bin system (cans, plastics and card/paper waste) being trialled in the main public picnic area. Results may result in further use around site.

Use and recycling of office paper

All office printing paper used is of recycled type; waste paper is recycled again through a contractor.

Extensive re-use of stone/wood/some metal (buildings/grounds teams)

Over 90% stone and much wood is recycled for use in building and grounds projects around our site. Metal is also recycled through re-use when appropriate. All construction work is carried out by our own teams onsite- materials are only brought in when necessary and we have stores of common materials here.

PIR controlled lighting/LED/energy saving bulbs

Movement sensor lighting is used in places around site in place of constant illumination (toilet blocks and main public areas). LED lighting is used in some animal housing and display areas- we have been encouraged to use more of this or similar for

further energy conservation. Energy saving light bulbs are commonly use in public/private areas, along with lower energy strip-lighting (fluorescent tubes).

PIR flushing urinals/sprinkler taps/cistern 'hippos'.

Urinal flushes are PIR (movement) sensitive in public toilets. Reduced water waste sprinkler taps are in place and 'hippos' used in toilet cisterns to reduce flush flow.

Green tiger enclosure

£200,000+ was spent in 2009 building a new tiger enclosure with many green features including channelling of waste to the reed-bed effluent system, use of recycled water and water control for tiger ponds and housing unit. Trees have been planted in and around the enclosure- with a large new willow plantation just behind. Although little electricity is needed for the compound (no need for heat due to species requirements) we have prepared a cable linkup for a second wind turbine which may be installed at a later date. This can easily be switched over to from current when necessary.

Arable crops

Our 200 acre arable farm provides straw to be sold off or kept on site for use as animal bedding. An effective, natural recycling method for the many tonnes produced each year.

Manure/compost heaps

Tonnes of animal dung is re-used for fertiliser on the farm where appropriate and vegetable waste from animal feeding, staff room and accommodation is used to generate compost.

Tree plantations

We have planted over 20,000 trees during the last 5 years to provide cover, attract wildlife and produce browsing material for some tree-grazing animals such as giraffe and tapirs.

Locally sourced feed

Much animal food is sourced from independent local markets and butchers in the vicinity, providing good quality cheaper food and enabling us to support local businesses while reducing transport costs.