Roaring Success: Supporting Zoos Move Towards Zero Waste

Here at ACM Environmental, we manage waste with some of the UK's most prestigious Zoos, helping them move in a direction 'towards zero waste' in line with sustainable Circular Economy objectives. Zoos typically are fairly complex operations with waste being generated across the site, such as:

- Front-of-house waste
- Back-of-house waste
- Catering waste
- Animal waste
- Facilities waste
- Visitor waste

...and many more! We manage up to 30 different waste streams for some of the Zoos we work with!

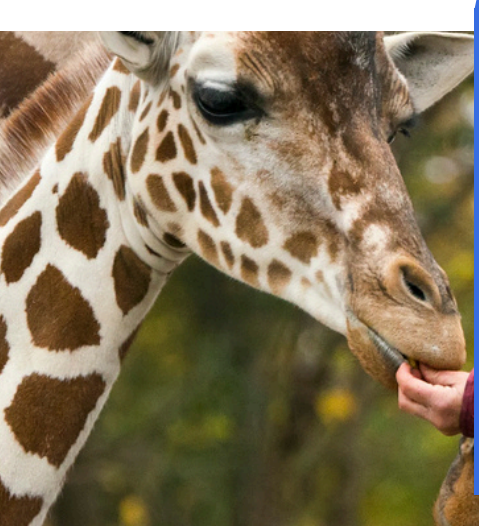
Our Greener Path Programme

The ACM Greener Path Programme takes away the day-to-day burden of waste contract management for the Zoo Operations Teams, enabling them to benefit from ACMs insider industry expertise acting as if they had their very own waste expert working in-house. ACM ensures that waste is managed in the most compliant, transparent, efficient, cost effective and environmentally friendly way all on a continuous improvement basis.

Critical to Zoos, conservation organisations and other organisations where mitigating the devastating global effects of waste on the natural world are a high priority, ACM demonstrates transparency of waste outcomes and avoidance of greenwashing for your waste operation. In line with Waste Hierarchy principles, we ensure that waste is always given the best opportunity to be prevented, reused, or recycled, and where we have residual waste remaining, we ensure it goes to the most environmentally sustainable process to be managed through our managed contractor network.

ZSL LONDON ZOO

ZSL WHIPSNADE ZOO



In 2010 ACM started working with Zoological Society of London (ZSL - London and Whipsnade). The brief was to move the Zoos away from landfill within 5 years with a 95% landfill diversion target set and ZSL selected innovative waste management company ACM to partner with them on this journey. Once the initial period of the partnership passed, a comprehensive review of the zoo's practices and operational set up led to a completed overhaul of waste segregation and collection infrastructure at both sites including compactors that reduce transport costs, completely new visitor bin infrastructure, an electric hybrid refuse collection vehicle for silent waste collections about the Whipsnade site, and 21 bespoke hydraulic lifting and tipping devices that enable keepers to tip waste from wheelbarrows into large containers safely avoid manual handling injuries. In 2018, our partnership was rewarded by winning the National Recycling Award for Equipment Innovation.

As a measure of success against the original challenge, today ZSL is 100% diversion from landfill and 65% of the waste produced across both sites is reused or recycled.

Working with ACM and their one stop shop solution is like having a large logistical weight lifted. The tracking of all our waste streams is straightforward with the online WasteTrack system and is easily accessible. The ACM staff I have dealt with have all be professional, knowledgeable, and very helpful.

Jamie Turner, Estates Manager, ZSL London Zoo

ZSL | LONDON ZOO

RZSS EDINBURGH ZOO

The Royal Zoological Society for Scotland (RZSS) joined the ACM Greener Path Programme in 2019. Prior to ACM, only very limited options were available to RZSS from the local contractors where all wastes were collected only in open top skips. This was inefficient in terms of payloads and meant compliance issues for RZSS as open top skips are not 'secure' for Duty of Care purposes.

With immediate effect, ACM moved the operation across to waste compactors delivering operational benefits of cleanliness, transport efficiency, reduced vehicle movements and improved peak / trough planning capacity. 100% landfill diversion was achieved and evidenced through the WasteTrack portal with animal bedding now composted at an offsite facility too. Operational labour cost savings have been identified through the introduction of solar compactor bins in key locations for visitor waste around the estate as fewer empties are required by staff. Currently an in-vessel composter is proposed that could enable RZSS reducing the dependence on costly off-site waste contractors and turn spoiled animal bedding into compost for on site use.

We have been working with ACM for several years now, and have been very happy with the service they provide us with. They have been more than happy to work with us to find innovative solutions to managing our varied needs. We particularly appreciate having easy access to so much information on our waste streams through the Waste Track platform, including environmental analysis and information on the associated carbon emissions. It's very useful to have access to compliance documents in one place as well!

Joanne Manders, Sustainability and Compliance Team Leader, Edinburgh Zoo

CHESTER ZOO

The Zoological Society of Northern England approached ACM in 2018 when it tendered for a waste partner to help it deliver a corporate strategy objective of 'towards zero waste by 2030'. Refreshingly, Chester Zoo's approach was a listening approach rather than merely prescriptive meaning that ACM could advise from the onset as to how best genuine zero waste might be achieved through the transformative Greener Path Programme.

ACM have been Chester Zoo's operational waste management provider since 2021. In the same year, as part of its Conservation Plan, the charity zoo set out its ambitious sustainability goal to work towards a zero waste operation by 2030. Chester Zoo's less prescriptive approach meant that ACM could advise from the onset on how the journey towards zero waste might be achieved, with support from our transformative Greener Path Programme.

ACM transitioned waste streams to a consolidated 'managed' supply chain where compliance and waste outcomes can be more fully demonstrated, with transparent reporting of waste data through the ACM WasteTrack portal. ACM conducted a series of detailed audits and analysis of the zoo's operational waste and, for the first time, Chester Zoo had a meaningful and consolidated insight into the impact of its operational waste, available at the touch of a button!

> *What's really critical here is bringing in valuable expertise that lets you know that each step you are taking is going to get you that little bit closer to reaching that goal.*
>
> ***Jen Kelly, Head of Sustainability, Chester Zoo***

With data now available, ACM supported infrastructure upgrades to facilitate the way forward for each waste stream on a step-by-step basis. This included the provision of two mini electric refuse collection vehicles that safely and silently collect waste from around the estate, whilst reducing greenhouse gas emissions and manual handling requirements, and the design and supply of hardware and equipment for a new 'Resource Recovery Centre'. This now allows the zoo to handle its waste in the most effective and cost-effective manner. All hardware and equipment is supplied off balance sheet, meaning no capital investment is required by the zoo.

> *What's been really key is understanding the end destination to that piece of waste, where does it end up and what ends up happening to it .... if it's something we have need to dispose of, where can we put it and what's the best path in order to steer it back into the Circular Economy.*
>
> ***Gareth Simpson, former Head of Operations, Chester Zoo***

We have now turned the corner with wastes starting to move up the Waste Hierarchy and we have medium- and long-term ambitions to help Chester Zoo reduce waste costs significantly. ACM offers pro-active expert support and advice to Chester Zoo, relieving some of the day-to-day operational burden from the Operations team and utilizing the entire supply chain network of circular economy specialist Reconomy to deliver exceptional waste outcomes.

Russ Sampson, Waste & Recycling Consultant at ACM Environmental, stated

"Chester Zoo is a brilliant example of an organisation that is authentically committed to achieving real change through its resource management strategy. With our support they are making substantial operational changes to do what is right for our precious environment. I am certain that we will continue to make strong progress towards Chester Zoo's ambitious objectives and help deliver impactful change."

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As part of the zoo's Zero Waste Delivery Group, ACM also provide advice to help define the strategic direction and to facilitate the continuous improvement of waste up the 'Waste Hierarchy' towards Zero Waste. The group meets regularly to maintain progress, oversee operational changes, develop new approaches and to address supply chain choices with teams across the zoo that can 'turn off the tap' of hard to manage materials and waste streams, taking us on the incremental steps towards zero waste.

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Chester Zoo has seen improvements in waste outcomes, with waste starting to move up the Waste Hierarchy as well as looking at the medium to long-term interventions needed to help meet its ambitions for zero waste. ACM offers pro-active expert advice to Chester Zoo, supporting the zoo's Operations Team in day-to-day delivery and utilises the supply chain network of circular economy specialist Reconomy to deliver improvements in waste outcomes.

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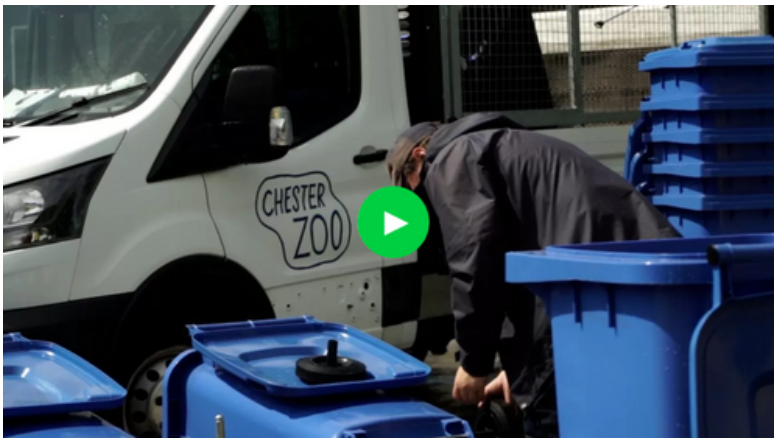
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