

Sustainable Approaches to Design and Making for the Outdoor Arts

Below are just a few suggestions and top tips on how to design for Outdoor Arts in a more environmentally sustainable way based on what Daryl & Co and Mimbres learned through touring their co-production 'Look Mum, No Hands!' in 2022

Please note, this list is by no means exhaustive but rather it covers key areas for consideration when designing for outdoors...

General

- Create a sustainable pre-production and post-production 'disposal' or aftercare documents. You can see the one we created for Look Mum, No Hands! [HERE](#)
- Give time and resources to experimentation with sustainable and/or recycled materials and processes.
- Work with smaller, ideally local, makers/producers.
- Source materials and equipment close to the place of manufacture or use suppliers that do.
- Reduce wastage by reusing, recycling or donating leftover materials.
- Reduce your carbon footprint by consolidating shipping/transport.
- Hire and/or borrow where possible.
- When sourcing, both online and in store, consider the ethical practices of the supplier.
- Keep in mind freight and transportation when designing to help better reduce transport emissions.

Set

- Check for FSC certifications, which ensures timber used for construction is from sustainably managed sources.
- Try and minimise the use of new or 'virgin' materials.
- Where possible, avoid using non-biodegradable material such as glitter and plastics.
- Switch off any powered tools and equipment when not in use and avoid leaving power tool chargers plugged in when not in use.

- Avoid leaving power tool batteries 'charging' once fully charged. This can increase the self-discharge rate and reduce the life of the battery.
- Regularly repair, mend and carry out preventative maintenance to better extend the 'life' of set and costume pieces.
- Consider recycling, repurposing or donating any set and costume at the end of their 'service life'. Initiatives such as Set Exchange (<https://set-exchange.com/>) provide a free platform for rehoming unwanted scenic items, which can be posted on their website and made available to the wider Theatre community to reuse.

Costume

- Use natural biodegradable or better still, organic, vegan and/or recycled and upcycled fabrics and garments in costuming
- Source secondhand from flea markets, charity and vintage shops and from online resale shopping platforms such as Ebay, Depop and Vinted.
- Use non-toxic dyes, materials and processes and water-based paints that have low VOCs (volatile organic compounds).
- Practice eco-friendly costume cleaning and drying. Use of warm, not hot, water for when laundering costumes e.g wash any laundry at a temperature of (or lower than) 30°C.
- Use concentrated eco-friendly detergent.
- Air-dry costume outside where possible or in a well-ventilated room indoors. Allow for air flow and well space any wet costume to help dry them more efficiently.

Be sure to build time into the schedule for reflection and evaluation. For example, how successful were we in promoting sustainable working practices and what would we do differently moving forward?

Finally, make use of other resources - We found The Theatre Green Book (<https://theatregreenbook.com/>) and SiPA: The Sustainability in Production Alliance (<http://sipa.global/10-easy-wins/>) extremely helpful when thinking on the above.



Look Mum, No Hands!

Design Comparison Table

To better understand the cost implications we faced when looking to design in an environmental way, here is a comparison table which details just a few of the items sourced for Look Mum, No Hands! and their attributes alongside visually comparable alternatives.

To be able to design in an environmental way it is key to budget accordingly at the start of the project to ensure you are able to make the most environmentally friendly choices at the start that could decrease our carbon footprint over the lifespan of the project.

Please note, all prices have been rounded to the nearest £ (inc. VAT) and correct as of 01/09/22.

ITEM WE USED	DETAILS	ALTERNATIVE	DETAILS
<p>IKEA ODGER CHAIR</p>  <p>£75</p>	<ul style="list-style-type: none"> • Composite construction - 70% polypropylene and 30% wood fibre sourced from reclaimed wood. • Purchased locally in Greenwich and collected in-person on a combined trip using public transport. 	<p>NINGBO PLASTIC STACKING CHAIR</p>  <p>£19</p>	<ul style="list-style-type: none"> • 100% 'virgin' polypropylene and tubular steel construction. • Mixed material products can be challenging to recycle because materials must be isolated to effectively process and reuse them. • Delivery from Wrexham - 180 miles from London.
<p>NBB 1500mm (L) RECYCLED PLASTIC BENCH</p>  <p>£246</p>	<ul style="list-style-type: none"> • 100% recycled high-density polyethylene (HDPE) construction. • The non-porous makeup of plastic means water cannot penetrate the material which is the cause for splitting, warping, twisting and distortion in untreated timber. 	<p>SETON 1500mm (L) POWDER COATED BENCH</p>  <p>£176</p>	<ul style="list-style-type: none"> • Powder coated aluminium and plastic construction. • Mixed material composition can create challenges when recycling because materials must be isolated in order to effectively process and reuse them.

ITEM WE USED	DETAILS	ALTERNATIVE	DETAILS
<p>EUROFLEX 345mm (D) HALF BALL</p>  <p>£150</p>	<ul style="list-style-type: none"> • >20% recycled rubber granulate composition. • Uses secondary raw materials and reduced CO2 emissions. 	<p>SPORT-THIEME 400mm (D) HALF BALL</p>  <p>£45</p>	<ul style="list-style-type: none"> • 100% 'virgin' PVC composition. • While most plastics do not get recycled, PVC is perhaps the worst offender as it's the least recyclable of all plastics. This is because PVC items contain additives that can make recycling expensive and impractical.
<p>TOAST DYED LINEN JUMPSUIT</p>  <p>£145</p>	<ul style="list-style-type: none"> • 100% linen composition. • Biodegradable • Linen is made from the durable flax fibres making it very hardwearing thus extending the 'service life' of a garment. • Retailer champions responsible working practices and works with fair trade cooperatives and small workshops to produce its products. • Uses with green delivery services and consolidates shipments to maximise transportation space. • Avoids excessive shipping of raw materials and sources materials close to place of manufacture. 	<p>BOOHOO CULOTTE JUMPSUIT</p>  <p>£14</p>	<ul style="list-style-type: none"> • 100% 'virgin' polyester composition. • Non-biodegradable • Whilst PET can be recycled it has its limitations. For example, many polyester garments are made from blends of fibres making them more difficult to recycle. • Fast fashion retailer, Boohoo, has come under fire in recent year over allegations of poor working conditions at its warehouse in Leicester and "serious issues" were found in the company's supply chain.

This document has been created by Jonathan Van Beek, Designer of Look Mum, No Hands!

