

#### Introduction

At Friendly Fox Design, our mission is to find new ways to excite children about nature. We provide innovative interactive trails, products and educational workshops to encourage engagement and support IT skills. The future of our planet depends on the wildlife around us and it is vital that the next generation cares about preserving green spaces and habitats. Older children can become detached from nature, particularly in urban areas and this is a critical stage when they form opinions and lifetime habits. Over 30% do not engage with outdoor play in wilder places, activity that can also benefit their physical and mental wellbeing. We augment reality with digital characters and stories that appeal to children's emotional needs. Engaging animations, superimposed on the environment, can tell interesting tales about the landscape, introduce fascinating creatures and set tasks as part of a 'secret mission'.

By installing a physical, or purely digital, trail, landowners play their part in encouraging outdoor activity and learning about nature, while also increasing footfall to their site. We also provide teaching packs for educators that allow children to make their own games and learn IT skills. Our solutions are based on years of research and co-designing with children, parents, schools and members of wildlife organisations.



#### Story Example

- Fox enlists the child on a mission to defeat the wizard (who represents climate change)
- Animated characters based on wild creatures introduce tasks.
- The creatures give rewards in return for the players help
- The child is able to save the forest











# What?..User Journey

The productions can be added to most outdoor locations and do not require internet. Animated content can be triggered by images added to installations in the landscape, or GPS location services if preferred.

- Before starting the adventure, players are provided with simple instructions for downloading the App.
- Players are guided to visit a specific location and directed to the starting point.
- The children find animal pictures, which can be situated on a dead tree, carved sculpture
  or other physcial objects. They come to life through Augmented Reality\* via the App (this
  capability is installed on most smart phones).
- Children are encouraged to follow the trail to find the characters, who ask them to carry
  out tasks within the natural environment. This provides exercise, improves wellbeing
  through sensory experiences in the environment and teaches them about wildlife and
  flora. They learn increased respect for green spaces too.
- The trail signage can also include information and activities of a non-digital nature for older members of a community or those who do not want ot use a screen.

Animated characters are revealed through the App that introduce the mission, provide information and activities



Video plays to reveal the task





### Who?

#### **Interested parties:**

- Our digital adventures are likely to be of interest to anyone who cares about educating future generations to appreciate nature as well as those who campaign for health.
- Landowners, councils, wildlife or wellbeing organisations, or educational bodies who
  wish to encourage families or school groups to green spaces, would benefit from
  implementing outdoor digital adventures in their locations. This can support revenue,
  increase social capital, improve amenities less expensively than play equipment,
  boost the local economy and encourage respect for natural environments.
- Schools or families may also be interested in co-designing trails as part of a community project.
- Further games can be downloaded by families, along with purchasing associated merchandise..

#### **Audience:**

- The productions are aimed at the whole community but older primary children are a critical audience; they have capacity to remember experiences.
- Children who live in urban, low income or BAME populations are less likely to visit natural spaces according to Natural England reports (O'Neil, 2018, O'Neill,



Habits around nature:

• Will go on walks if parents make her.

• Enjoys countryside once there, but thinks it 'uncool' and boring.

• Hates nettles, getting dirty and is afraid of inser.

2020). For these reasons the games are also designed to address these audiences.

# Why digital?



Some people are sceptical about children using screens outdoors because they are associated with a focus away from the real world. However, our research has demonstrated that it is vital to introduce enticing mechanisms to engage children with the wild. Despite research to show that outdoor play in natural spaces, can benefit mental and physical health (Travlou, 2006, Juniper, 2013, Gill, 2011, Sheldrake, 2019), figures suggest that there has been no improvement in the number of children accessing green spaces in the UK in the last 10 years and, in some areas,

there has been a decline (Louv, 2005, Moss, 2012, Wooley, 2011, Burt, 2015, O'Neil, 2018, O'Neil, 2019, O'Neill, 2020).

We have developed our productions to minimise screen time and optimize exploration and physical immersion with the landscape, to address concerns of children overusing technology. They will also encourage children to visit again by associating enjoyment with wild spaces and understanding more about them.



# How.. do they differ?



Our games use Augmented Reality (AR) to present animated characters that introduce an enticing mission at particular locations. This allows experiential learning directly from the environment and activities can be sited according to landowner's requirements. Other popular digital games are not situated within a specific environment or designed to ensure that players are aware of what they find, for example Pokemon Go! (https://pokemongolive.com/en), or Caper (www.caper.co). The Gruffalo

trail is an example of an interactive experience implemented in Forestry England woodlands (www.forestryengland.uk/gruffalo-spotters), however the characters and stories are based on the preferences of very young children and fun rather than understanding.

Each of our digital trails can form part of an enticing mission, focussed on creating more empathy with surroundings. Children may be asked to: 'Make a magic potion to stop the evil Wizard destroying the forest!' for example. They will be motivated to run around, explore and learn.

Unlike Virtual Reality (VR) productions, where the audience wear a head-set, the child is still aware of their surroundings, allowing increased immersion in the physical world. The games also feature activities that require children to look away from the screen and interact with the landscape as far as possible, developed through collaboration with wildlife organisations\* and co-created with children to meet their preferences.

### Summary

#### The games have been designed to:

- Encourage visitors to engage with a particular location and learn about their surroundings.
   They can improve connection to nature through increased knowledge and experiences in a natural space.
- Use simple image markers in the landscape to trigger enticing media and animations through normal mobile devices that will excite young people about their visit.
- Inspire motivation, through a game mission, that will appeal to a child's emotional needs, including stories that were co-created with children as design partners.
- Lead players around a trail to the features that are most important, encouraging exercise and exploration (if required, visitors can also be led to important attractions to extend the trail, such as a café or shop).
- Optimize immersion in a landscape and looking away from the screen, through activities that address different types of play and use all of the senses.
- Be easily downloadable and adapt to different spaces.
- Allow new games to be downloaded for the same site, making an investment sustainable over time.



## What?..Trail Options

There is no need to have physical installations in the landscape, but interesting sculptural features can draw attention to the trail and make it more tangible. It can also allow the addition of logos or branding. This may be a way to recognise stakeholders or sponsors for fundraising purposes. It can also be used for promotion, for example of educational providers who run game design workshops based on the themes.

- GPS only
- Simple signage mounted on exisiting trees
- Signage with more information and larger or shaped mounting boards





• The triggers can also be mounted on more sculptural forms, which can be co-designed by the community or by local artists. Chainsaw sculptures of wildife can be a good way to make the locations more visible.