<table>
<thead>
<tr>
<th>CONTENTS</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INTRODUCTION</td>
<td>3-4</td>
</tr>
<tr>
<td>‘MY WILD LIFE’ MEMORIES</td>
<td></td>
</tr>
<tr>
<td>1. What species?</td>
<td>5-6</td>
</tr>
<tr>
<td>2. Where?</td>
<td>7-8</td>
</tr>
<tr>
<td>3. How?</td>
<td>9-10</td>
</tr>
<tr>
<td>4. Who with?</td>
<td>11-12</td>
</tr>
<tr>
<td>CONCLUSIONS</td>
<td>12-15</td>
</tr>
</tbody>
</table>

Words used in wildlife memories collected by Froglife’s My Wild Life project
INTRODUCTION

There is a wide range of evidence suggesting that today’s children in the UK are being starved of contact with nature by a growing number of barriers. There is also an increasing drive to address this problem in order to improve children’s lives and to ensure that nature is protected and conserved for the future.

Since the term ‘nature deficit disorder’ was coined by author Richard Louv in 2005, several studies have been conducted by concerned organisations looking for answers. Their objectives and scope vary, so a summary of the most influential work provides a useful background to Froglife’s work in this area and this My Wild Life report.

In 2009 Natural England produced their report Childhood and Nature: A survey on changing relationships with nature across generations. This was a quantitative study designed to give a statistical explanation of the difference in contact with nature over different generations. It showed that children desire more freedom to explore natural spaces and aimed to promote making natural spaces more available to today’s children.

In 2010 the RSPB produced their report Every Child Outdoors, which summarised previous research on the subject and presented the RSPB’s own research into the most remembered childhood experiences with nature. This research found that a very high proportion of those surveyed remembered outdoor experiences of the natural environment, and that 92% agreed it was important for children today to have similar experiences.

In March 2012 the National Trust released their Natural Childhood report written by author Stephen Moss. This report launched their Natural Childhood Inquiry and asked for submissions from experts and the public on the barriers and solutions to children’s connection with the natural world. In May the Trust launched their 50 Things to do before you’re 11½ campaign to encourage children to get outdoors and actively engage with nature. The results of the Inquiry, published in September 2012, found that everyone has a part to play - families need to do more to support their children’s access to nature, a better network of accessible and family-friendly green spaces needs to be developed, and schools need to do more to bring children closer to nature during the school day. The report also identified that all sectors need to adopt a benefit/risk approach to support children’s adventures.

The Inquiry found that the major barriers to children getting close to nature include excessive health and safety, traffic danger, poor quality and inaccessible green spaces, busy school timetables and increased indoor entertainment. In September the Natural Childhood Summit brought policy-makers, NGO’s, teachers and other experts together to build a consensus around the action now needed to bring children into greater contact with nature.

Froglife’s My Wild Life project began in 2011, to investigate how biodiversity and the way children experience nature have changed over time. Froglife is a national conservation charity which focuses on native reptiles and amphibians and their habitats. We work with audiences not usually included in conservation work, such as disadvantaged young people and young offenders, which has made us aware of the negative impacts a lack of contact with nature can have on children. This education and social inclusion work also takes us to public events where people ask “where have all the newts gone?” The stark contrast between older people asking concerned questions about animals they played with as children, and the young people we work with not having heard of newts, encouraged us to create an intergenerational project specifically concerned with wildlife and wild play.

My Wild Life, funded by the Heritage Lottery Fund for two years, began in February 2011 and worked
in and around Peterborough, London and Glasgow bringing different generations together. We ran reminiscence sessions and events engaging with a wide variety of community groups of all ages, and collected a huge range of nature memories. These memories were recorded either on film or in writing to create an oral history archive. The memories range from brief statements to incredibly detailed stories captured during in-depth interviews.

The memories collected by the project have been collated into the My Wild Life book and film, and show how contact with nature has changed within living memory. They also provide real-life examples that help to explain complex issues such as biodiversity and habitat loss, and aim to inspire the next generation to conserve their natural heritage.

When it came to producing a report about the project, Froglife decided not to re-invent the wheel by producing another report confirming that generally older generations had more freedom to play outside, and that most children today prefer watching television to climbing trees. We chose instead to take a more in-depth look at the memories themselves, and analyse what they can tell us about how and why people enjoy contact with nature.

This report looks at the wildlife that features in some strong childhood memories, at the landscapes that are the backdrop for creating lasting memories, at the level of interaction we need with nature to remember it into adulthood, and who we have these important experiences with (if anyone).

We then suggest ways in which today’s children can meaningfully engage with the natural world, based on what had an impact on previous generations. We don’t expect to be able to say that ‘going frog watching with dad in the woods is the perfect experience with nature’ and therefore eliminate nature deficit disorder, but we do expect to inform future work in this area by providing simple templates for significant experiences with nature.

Our data comes from over 300 written memories collected at reminiscence sessions and events, and more than 25 interviews which were filmed or recorded. We will also refer to data from our ‘have you ever?’ survey which asked 32 children of varying ages whether they had ever taken part in ten traditional childhood activities, such as climbing trees and catching butterflies.
MY WILD LIFE MEMORIES

1. WHAT SPECIES?

A huge variety of flora and fauna was mentioned in the wildlife and wild play memories collected by Froglife. An analysis of these memories may tell us which living things are more likely to inspire the naturalists of the future. Should we be organising bug-hunts or bat walks, bird-watching or pond dips?

This chart shows the proportion of references to different types of organisms in memories collected by the project. Some memories mentioned several different species and others didn’t specify any. The total number of references analysed was 368.

This analysis shows that amphibians and reptiles were referred to in over a third of the memories collected by the project. We would expect some bias in favour of these species as the project was run by an amphibian and reptile conservation charity. Even taking this bias into account, this is a high proportion, so it seems that catching newts, lizards and frogs were common and meaningful childhood experiences for older generations.

“One particular place that I always liked visiting was a pond. I used to catch newts there. On one occasion I was able to catch a great crested newt and I was really struck by the size of these animals. Six inches long, really vivid bellies and great crests on their backs - beautiful animals. About ten years ago I went to revisit this site and I found that the pond wasn’t there any more.” Jonathan, 51

One memory that was also repeated time and again during the project was collecting frogspawn in jars. 11% of wildlife references related to frogspawn or tadpoles, so it seems that (even taking into account the ‘Froglife bias’) the experience of collecting spawn and watching tadpoles develop into frogs was particularly important.

“We’d always take...a jar on a bit of string so we could go in the dyke and get some frogspawn...everybody had frogspawn.” Yvonne, 64
Birds were also very common characters in the memories collected by the project. It seems that children are fascinated by birds whether they are watching, identifying or feeding them, and whether it’s a golden eagle or a blackbird. From the memories collected, it is clear that the fascination can last a lifetime and can encourage a wider appreciation of nature.

“I have one incredibly strong memory as a kid which is lying in bed and listening to the birds singing outside. I remember thinking ‘I want to know what those birds are,’ and 40 years later, hey presto, I do!” Mike Dilger’s memory filmed during the project shows how his obsession with birdsong led to a career working with wildlife.

Plants of all kinds made up 15% of the wildlife references in the memories and had an important role to play in forming the childhood memories of older generations, whether it was picking berries or climbing trees. The most common memory featuring plants highlights how practices have changed over time, as picking wildflowers was once commonplace, but is now considered unacceptable.

Invertebrates were mentioned a similar number of times and included the widest variety of species, from slugs and leeches, to crabs and dragonflies. Butterflies were the invertebrate mentioned the most often in memories.

Fish and mammals received lower numbers of references. This is perhaps not surprising as fish are obviously restricted by habitat and many mammals are predominantly nocturnal which reduces opportunities for childhood encounters. Fishing for sticklebacks and tickling trout were the most common fish memories, whilst watching badgers and foxes were the most common mammal ones.

There are clearly patterns in the living things that feature in our strongest childhood memories of nature. Our results suggest that showing a child frogs or newts can result in strong memories even compared to animals often considered more ‘charismatic’ such as badgers or foxes. These animals may also be more accessible than mammals. Of course, every child is an individual and will take something different from an experience. However, when we’re looking for ways to engage children with nature, it’s interesting to see that all species can inspire. One thing we know for sure is that we must conserve these living things and their habitats so that children continue to have the opportunity to engage with nature and create their own memories.

MY WILD LIFE MEMORIES: SPECIES SUMMARY

- A huge range of species feature in lasting memories
- Amphibians and reptiles featured in over a third of memories
- Pond dipping and collecting frogspawn were common and fond memories
- Encounters with birds, plants and mammals also highlight the importance of conserving all our wildlife for human enjoyment and health.

Photo: Laura Brady
2. WHERE?

The next step was to analyse where lasting memories are created. Is there an ideal setting or landscape for memory creation? Should we be encouraging children to roam in the woods, or play on the beach for them to have meaningful engagement with nature?

The memories collected by *My Wild Life* were analysed for references to different settings and the results are shown in this Wordle (a word cloud which gives greater prominence to words mentioned more often). There were a total of 222 references to settings:

![Wordle](image)

It is immediately apparent that the memories collected were made in many different places; urban and rural, close to home and further away. The top three landscapes for creating nature memories are all very different; ponds, woods, and fields.

Ponds made up 15% of settings references, and water in general made up 32% (rivers, streams, lakes, canals). Bodies of water seem to have been given generic names such as ‘the stream’ - not necessarily accurate, as we could deduce from a few references to frogspawn in ‘the river’, which is unlikely. Clearly these wet places are extremely important settings for creating lasting memories of nature. This is probably due to the fun that can be had splashing around and getting muddy combined with the wealth and variety of wildlife they support, as shown by these memories.

“I used to walk into the countryside down 'the stony lane' to a pond in the middle of a field. Lots of frogs, newts, sticklebacks and insect life to marvel at and enjoy.” Les, 63

“When I was 10 there was a brickyard near me. They had a large pond in which I saw adders, grass snakes and great crested newts and common newts, frogs, toads and from then on it was ‘wow’.” Paul, 58

Woods are also important places for creating memories, perhaps because they’re good habitats for wildlife and we can have encounters with wild creatures there, or perhaps because they’re great spaces for adventure and we can build dens, climb trees or imagine Cowboys and Indians in the undergrowth. There seems to be some generalisation in the use of the term ‘the woods’ and it can
mean anything from Epping Forest to the clump of trees at the end of the lane.

“My Grandad used to take me out at night when I was staying with them. There was a war on and we waited until Granny went to bed and then crept out! We went to the local woods and sat in silence and we were often lucky enough to see badgers and cubs. We also saw owls, bats and numerous rodents. I was about 7 and still remember it today.” Janet

“Cycling into North Dagenham where Harnault Forest appeared so wild compared with the large estate where I lived.” Dave, 67

Fields were the setting for many memories collected by the project and again the term ‘fields’ may be a generic term for a wide open space. Memories set in fields often refer to a feeling of freedom, so perhaps these big open spaces give children a feeling of independence. Activities set in fields were very varied as these examples show:

“We could go off into the fields all day by ourselves. We spent hours making little felt horses and having gymkhana in the fields.” Judy, 59

“We used to have the run of the fields when we were wee. We also used to stop the tractor and move the peewit nests so they weren’t destroyed.” Jim

Other settings that were commonly referred to in memories were the coast and gardens. The coast perhaps created strong memories because it featured as part of a holiday or day trip and was therefore out of the ordinary. Gardens obviously feature strongly because they are so accessible and probably the easiest place for a child to discover nature.

Lasting memories of contact with nature can be created in countless settings and are very much dependent on the access children have to different landscapes. What we can say from our analysis is that water bodies, and ponds in particular, are an excellent resource for education and inspiration about the natural world. It is also clear that children need to be given the freedom to explore their local ‘woods’, fields and other wild places and discover their potential for themselves.

MEMORIES: LOCATION SUMMARY

- The top 3 settings for memories were ponds, woods and fields
- Bodies of water are important settings for creating lasting memories
- Nostalgia often generalises locations so that they just become ‘the woods’ or ‘the fields.’ These habitats could be any size, the most important thing is accessibility.
3. HOW?

Another important factor in creating a memorable wild encounter is the level of interaction. Is it enough to see something, or do we need to touch nature to remember it?

The memories collected by the project were analysed for references to different actions and the results are shown in the Wordle cloud below. There were a total of 289 references to actions:

![Wordle diagram](image)

If we group these actions into levels of interaction, we can see a clearer picture of how participants were involved in their memory.

Perhaps unsurprisingly, we found that ‘active hands-on’ interaction (catching, collecting, feeding, picking etc) makes up the greatest proportion of references with 61%. Getting up close with nature has the biggest impact on a child, whether it’s holding a frog or making mud pies. This also links to our findings during educational sessions where active or kinaesthetic learners can gain a huge amount through practical, outdoor activities.

‘Active hands-off’ interaction (watching, looking, finding, listening etc) makes up 37% of references. It seems that nature can capture the imagination of a child even when it is at a distance, although this happens for fewer people.

‘Passive hands-off’ interaction which doesn’t necessarily involve going outside (reading and drawing) was the least mentioned engagement with nature, comprising only 2%. This implies that it only had less of an impact.

Within these levels there are some other interesting dichotomies. We heard stories of children going out of their way to harm wildlife and accidentally harming wildlife, but also tales of children rescuing creatures and nurturing them back to health. It is often our early experiences with nature that teach us important lessons about cruelty and right and wrong. For example, both Dave and David have grown up to become keen naturalists. Dave was mortified that he’d been so deliberately cruel to the grasshoppers, but David accepted it as part of what children do to learn about the natural world:
“Pulling the back legs off grasshoppers in my garden and telling mum I’d found a new species that couldn’t jump.” Dave, 44

“Collecting bumblebees into an empty glass bottle and then emptying them into a barrel of water to see if they could swim! They all drowned - I was five at the time.” David

Janet on the other hand, who is also now a keen naturalist, had a very different experience:

“My brother found a baby thrush that was sick and he raised it back to health until it flew away again.” Janet

These memories highlight our ambivalence about the natural world - we can be both destructive and nurturing.

Strong memories came from a wide range of encounters and it is interesting to note that some of these encounters are completely accidental, like the one below, whilst others are actively sought out, like Jonathan’s quest for lizards:

“Age 5 walking through a wood with a friend. At the edge of the wood was a valley with a rainbow of wildflowers and as we walked into the field a cloud of butterflies flew up. Never to be experienced again.” Anon

“When I was a kid there used to be lizards. We used to go out and catch them. We had to look for them but when you found a little pocket of them there were loads. They moved really quickly. They built all over the area and they were gone.” Jonathan

It is clear that telling children about nature is simply not enough to educate them about the natural world. It just isn’t memorable enough to inspire or engage a child. Every child will demand a different level of interaction; some are happy to look, others have to touch, but the experience needs to be active so that children can connect with nature. Children need to see nature up close, get hold of it and understand it, in order to care about it. Whilst being careful not to harm wildlife through the interaction, it is clear that there are strong benefits for people getting up close to animals-potentially starting a connection that lasts a lifetime.

**MEMORIES: INTERACTION SUMMARY**

- Being hands-on with nature creates lasting memories
- Memories can be created either by chance encounters or by deliberately seeking them out
- More research could explore the benefits for children of handling wildlife vs the risk to the wildlife involved
- Adults may have an important role in teaching an ethical approach to wildlife.
4. WHO WITH?

Finally, we analysed who people were with in the memories they shared. Can we create lasting memories of nature when we’re alone, or do we need someone else to share the experience?

Analysis shows that 39% of the memories collected by the project were created by children on their own and 43% were created with others present. The other 18% of memories do not specify. This relatively equal split suggests that children engage with nature both on their own and with company, and lasting memories can be created in either scenario.

Further analysis reveals that of those memories that mention being with company, 51% of that company is peers, 31% is older, and 16% is both (2% is unknown). So, in theory, it is more likely that a lasting memory will be created if children engage with nature when accompanied by their peers. This links into the findings of the studies by the National Trust, the RSPE and others around the freedom of young people to explore and play on their own in wild places.

“I was born in 1951 in Devon. When I was wee our mum used to pack us off with a bottle of squash and a cheese butty and we would be off to the woods, or down the stream or by the river making rafts to float, bows and arrows and lots more. Mum would come and look for us at about 8 in the evening. Good times!” Anon

However, we can not underestimate the importance of what Froglife term ‘nature mentors’ in inspiring and educating children about the natural world. There were a total of 53 references to mentors, which equates to a mentor featuring in 17% of the memories collected. The chart below shows who takes the role of nature mentor in these memories:

![Mentor references in memories](chart.png)

Parents made up the greatest proportion of references to nature mentors, and fathers were mentioned the most often. It seems that parents who had an interest in the natural world tried to encourage this in their children by sharing their knowledge, and helped to create lasting memories:
“We were taken out every weekend for picnics or walks. My father would teach us all the names of the birds and flowers as we went. I feel privileged to have had such experiences.” Margaret

Extended family made up a sizeable portion of nature mentors, with grandparents being the most common. Older siblings and other family members such as an uncle were also mentioned.

“My elder brother wading through a local pond when I was 6 looking for newts to show me.” Anon, 45

Teachers made up a reasonable proportion of mentors, although perhaps not as high as you may expect bearing in mind that nature studies and the nature table were a fixture in most schools for older generations. This memory from Caroline shows the impact an inspirational teacher can have on a child’s attitude towards the natural world:

“When I was 7 my teacher took us on a nature walk through ancient meadows and ancient woodland. She named all the plants and insects for us. That inspired me and I am now an education officer for the RSPB” Caroline, 54

There were a few other mentors mentioned such as farmers, and even the BBC, but these made up only a small percentage.

“The farmer took us into woods next to the road, said bring torches, we stood still on a track, torches on, and a family of badgers walked across our feet. They were so used to the car head lights that they didn’t care about the torches!” Richard

It is clear that a lasting memory of nature can be created when alone or with company. It’s also clear that children seem to create more lasting memories when they are playing with friends. Sometimes though, we need someone we admire to inspire our interest in something and the role of ‘nature mentor’ cannot be ignored. Families and schools therefore have an important part to play in accompanying children on their nature adventures, particularly in helping young people access wild areas they would not necessarily visit alone.

**MEMORIES: WHO WITH? SUMMARY**

- Lasting memories were created both when children were with company and when they were alone
- Opportunities to play with peers in natural spaces were very remembered positively
- ‘Nature mentors’ are important for inspiring children about nature, can act as role models and provide an ethical context to interaction
- Families and schools are important in encouraging children to engage with nature, and sources of nature mentors.
CONCLUSIONS: CREATING MEMORABLE EXPERIENCES OF NATURE

“No one will protect what they don’t care about; and no one will care about what they have never experienced.” David Attenborough

The My Wild Life project was designed to explore and share the experiences different generations have had with nature. The project did this successfully through events and interviews, however we do not want to just find out about past experiences; we are keen to use the information to inform what we do in the future. In producing this report, Froglife aims to add something new to the debate about childhood and nature whilst offering practical ideas for engaging young people with the natural world.

In many ways, as other studies have found, children’s opportunities to engage with nature are much more limited now than in previous generations. To inspire future generations of naturalists we need to be proactive. If we deconstruct previous generations’ strongest memories of nature, we can stack the odds in our favour and provide a template for today’s children to create strong nature memories.

At the simplest level, the results of our memory analysis show the potentially inspiring impact of taking a child to a pond, giving him an amphibian to hold, and bringing his friends over to share the moment. Clearly the idea of following a recipe to encourage everyone to value nature through making lasting memories of nature in this way is over-simplistic, as every child has different preferences, needs and values. What Froglife has provided here however are some simple ways to maximise the potential of an experience with nature; to make it more meaningful and longer-lasting; to help inspire future conservationists.

THE VALUE OF AMPHIBIANS & REPTILES

Our species analysis was good news for Froglife. Reptiles and amphibians featured strongly in the childhood memories of previous generations. These species aren’t fluffy or cuddly, but they are fascinating, and amphibians in particular are very accessible which makes them ideal ambassadors for nature. Children easily found and caught frogs, learnt about ecosystems by pond dipping, learnt about lifecycles by watching frogspawn develop, and saw the effects of climate change and biodiversity loss when they revisited their childhood ponds to find them empty or dried up.

So, are children today getting up close with amphibians? Many of the children involved in the My Wild Life project had never seen frogspawn or tadpoles and weren’t aware that this is how frogs start life. In our ‘have you ever?’ survey, only 21% of children had ever collected frogspawn, compared to 88% who had collected shells on the beach. It seems that this once common encounter with the natural world is not being experienced by today’s children. However, those young people who had these experiences remembered them positively, suggesting a cross-generational fascination.

Our analysis of memories by species may encourage pond dipping over bug-hunts, or bird-watching over picking wildflowers, but it is clear from the huge variety of memories collected by the project that it doesn’t really matter whether a child has an encounter with a frog, fish, or fox. Any living thing can inspire the interest and love of a child, and most of the memories we collected had made a big impact on those involved regardless of how common the experience may have been.

The key is to encourage children to find their own favourites and teach them how nature is connected through ecosystems, so that one early experience leads to a respect for the natural world and a desire to conserve all of its inhabitants.
“Let us all take the risk of becoming attached to something out there. See deeply, open up your senses, become aware of the interconnectedness of life, and risk falling in love.”
Hugh Warwick

PROTECTING WILD PLACES FOR PEOPLE & WILDLIFE
Our settings analysis strengthens the case further for amphibians, as wet habitats, and ponds in particular, featured very highly in the memories. It is therefore important both to protect these habitats and to create new ones. Creating a wildlife pond in the garden, the school grounds or the local park could be a simple but significant way of giving children the opportunity to engage with nature.

The way that places are recalled in the memories also tells us a lot about how important nature is to people. Incongruities like frogspawn in rivers and the romanticising of ‘the woods’ shows that these places and experiences are important to us and make us happy. This nostalgia means that these wild places have value not just as habitats for wildlife, but as important places for us. It is important that we preserve our wild spaces, no matter how small or isolated, so that both wildlife and people can make the most of them. It’s also crucial to ensure and encourage access by young people, schools and families to some of these habitats for fun and educational experiences.

OVERALL
Froglife, along with many other conservation organisations aims to inspire a future generation of naturalists who will not only appreciate wildlife and habitats, but ensure that no more is lost. If Sir David is right, then the children growing up isolated from nature today are unlikely to be the conservationists of tomorrow. Does a lack of engagement with wildlife mean that we are less likely to conserve it? Older generations had much greater freedom to explore the natural world and had more contact with wildlife, yet actions were also taken by previous generations that led to the destruction of some of our wildlife heritage. Was nature so bountiful that it was taken for granted that there would be an endless supply?

This report adds to the evidence that there are opportunities for families, nature organisations, policy-makers and schools to facilitate children engaging with nature in very simple ways. It does not need to be expensive, time-consuming, or require a special trip. It does not need a qualified expert or any special equipment. It does not need to be organised or even planned. We just need to make sure it stays on the ‘to do’ list, the agenda, and the timetable. We also need to empower ‘nature mentors’ to take young people outdoors and help them have positive experiences with their local wildlife.

In addition, the My Wild Life project emphasises the need for further research into how we value nature, what makes a conservationist, what memories children today are making, and how encounters with wildlife convey conservation messages.
“We do not inherit the earth from our ancestors, we borrow it from our children”

Native American proverb

www.froglife.org
@frogglifers on Twitter
Froglife on Facebook

REFERENCES


