Part 1

Nature Provision for Very Young Children
This chapter explores settings where young children, some as young as 2 years old, spend most of their time at daycare outside. Two case studies are considered, and points for discussion raised. The reasons why it is important for young children to spend time outside will begin to be unpicked, a thread of thought that runs through this section of three chapters.

Across the UK, there are just a few settings who are aiming to provide everyday outdoor care and education for the very young, but they are increasing in number. Initial attempts to set these up were made challenging by the registration agencies, who found their own knowledge being extended by this new concept. The two case studies represent successes in Scotland and England, and point the way for others to follow.

CASE STUDY 1.1: AUCHLONE NATURE KINDERGARTEN

In 2006 Claire Warden opened this daycare setting in woodland 8 miles from Perth, Scotland. It caters for children from the age of 2 upwards. This includes out-of-school provision for school-aged children which stretches to week-long camps in the summer for 5- and 6-year-olds, with older children as youth leaders. Claire’s company, Mindstretchers (www.mindstretchers.co.uk/), is well known across the Forest School

(Continued)
community as a supplier of quality equipment and helpful literature, and Claire herself is an academic as well as a practitioner, involved in research and lecturing across the world, so Auchlone Nature Kindergarten is operated by a team of trusted nursery staff.

Their curriculum is nature based, following the Scottish ‘Pre Birth to Three’ for children aged 2–3 years and the Scottish ‘Curriculum for Excellence’ (CfE) for children from 3 to 18 years. For the 2–5-year-olds, they use Claire’s recording system of PLODS (Possible Lines of Development). Children’s voices and the process of learning are recorded in Talking and Thinking Floorbooks™, a method developed by Claire Warden. These books are created with the children; they share their ideas and contribute their understanding at their own level. They document group learning experiences and consultations and value each child as an individual, recording their progress and understanding throughout. These and staff’s post-it notes enable the staff to keep a book for each child’s individual learning stories. They record the child’s interactions with an event in the kindergarten – one they may have initiated or been invited to join. Staff then reflect on these interactions and how they relate to the Scottish curricula. From those reflections come the PLODS (see Figure 1.1), which then inform how staff plan for activities in subsequent days.

The children at Auchlone are outside in all weathers and all seasons but there are two indoor spaces that they can use. One is a small gatehouse to the estate where the wood is situated. This has interlinking small rooms with cabinets to store nature’s treasures such as stones, bones and feathers. They are grouped elegantly in ways

---

**FIGURE 1.1**

**Making Soup**  
*October 2013*

**Sophie’s Theories:**
- Soup needs different ingredients and needs to be stirred.  
- Cooking with a friend is better than on your own.  
- Mud is Fun!!!

**Possible Lines of Development for Sophie:**
- Provide Sophie with opportunities to make real soup.  
- Provide Sophie with opportunities to look at recipes and choose some.  
- Investigate with Sophie other uses for mud.
(Continued)

reminiscent of Montessori materials, and children can handle them and reflect on their place in the natural order. The other, adjacent, building is a more open wooden structure of two halves. One side has a wood burner surrounded by seating areas covered in blankets, and the other a kitchen area for food preparation with and for the children. Natural mobiles and displays decorate the space which feels like something between a tipi and a Scandinavian cottage.

These buildings are at the bottom of the slope up to the main woods, as is a mud kitchen (Figure 1.2), a fire pit and a cultivated growing area for food for the children. Again, they are involved in the growing process. Nowhere are the children restricted from participation in the running of their space. Areas merge into each other with a sense of the flow of experiential learning. Winding paths lead up into extensive woodland. Just off the paths are fallen trees to climb on, evidence of den-making activity, fire pits and a range of structures for purposes known to their creators, if not to a casual visitor. In one clearing, one can see a lake – the local inspectors have required this to be fenced off from unsupervised approaches: the only restriction that can be seen on following a nature pedagogy.

---

**CASE STUDY 1.2: FOREST KINDERGARTEN SEVENOAKS**

In 2014, Caroline Watts opened her Forest Kindergarten near Sevenoaks in Kent (www.forest-kindergarten.co.uk). It is a testament to her dedication that, after surmounting many difficulties with registration as a daycare setting, she was subsequently awarded an ‘Outstanding’ grade from a 2014 Ofsted inspection, praising its ‘child-led, vibrant environment’ and the positive impact it has on children’s learning, and noting that the nursery ‘is unique in that it uses the natural environment to maintain this’.

The National Trust has provided the wood for the nursery, and it undertakes the necessary safety inspections of the site, which has no indoor space for the children at all. The only shelter available is a large tent (see Figure 1.3), which contains books and blankets where a comfortable and cosy quiet space can be created. There is a composting toilet on site. The kindergarten is sessional, running from 9am to 2pm on three days of the week and 9am to 12 noon on two days, and can take 14 children per session. The children are between 3 and 5 years old, and attend a minimum of two sessions a week. Parents are given clear advice as to the clothing the children will need. During the school holidays, Caroline takes older children, up to 7 years old.

The sessions will always include breaks taken around the fire where warm drinks and food can be prepared. As well as the small wood which is the hub of the kindergarten, the site is surrounded by fields, and a green lane leads off into the countryside on the opposite side of the access lane to the wood. The children frequently set off along here to lead the adults into exploratory adventures that add additional layers of inventiveness to the adventures to be had through tool use and tree climbing around the base camp.
The kindergarten follows the English Statutory Framework for Early Years. Records are mainly kept photographically or digitally and are available to parents as well as satisfying the government requirements. The activities routinely include imaginative and creative opportunities, and cooking opportunities. Nature exploration and connection to nature through digging, collecting and observing the changing seasons are central. Construction tools are available, which encourage finding opportunities for mathematics, and understanding of the world through natural materials.

Physical development is supported when exploring the woodland, tree climbing, trying out rope swings, den building and making seesaws. Around the campfire, there are opportunities for circle time and daily reflection time as well as music games, dance, singing and rhymes.

It is interesting to note that neither of the case study settings takes children younger than 2 years old, and, although Auchlone does take 2-year-olds, they are for the most part children who are in the latter half of that year of growth. Being outside for the majority of the day is clearly a challenge for children 2 years old and younger. This is partly due to the ratio between surface and core in the body. Very young children have much higher skin to body mass ratios, making them more vulnerable to extremes of temperature.
This is not to say that babies and toddlers do not benefit from spending prolonged periods of time outside. Up until the 1950s in the UK, it was commonplace to place babies in prams outside to gain the benefits of breathing fresh air, and toddlers accompanied older children and adults as they worked in gardens and fields. But from the industrial revolution onwards, this declined, particularly amongst those poor who moved into cramped and crowded accommodation in the expanding urban areas around new factories. The discovery of the parlous state of health of the urban poor in the 1870s led to the founding of the McMillan sisters’ outdoor nursery in Deptford (Cunningham, 2006: 184), as it was realised that to deprive very young children of fresh air and outdoor exercise appeared to stunt their growth. However, since the 1950s the increased need for parents to both work outside the home has led to a corresponding increase in daycare settings, not all of whom were initially equipped to provide a rich outdoor environment for their charges.

There are many reasons why free access to rich outdoor provision is important for all children. This chapter will only explore a few of them and it will take all of the chapters of this section to build a full picture of why this is so important, and how it relates to Forest School practice.

The most obvious reasons for providing regular and protracted outdoor learning opportunities are the physical ones. The Victorians found that the urban poor, living in cramped and enclosed conditions, were smaller and less healthy than their equally poor country cousins, hence the foundation of the Deptford Day Nursery by the McMillan sisters. Increased opportunities for fresh air and for vigorous outdoor exercise stimulate increases in bone and muscle development. In the two case studies, children are free to walk up and down hills across different natural surfaces. They can climb trees and logs, and build dens from wood and brush. They dodge under, round and through a range of natural barriers. This is ‘We’re Going on a Lion Hunt’ (Cuyler & Mathieu, 2014) in a real way.

More physical reasons to establish habits of going outside include the rise across the wealthier nations of childhood obesity. Figures from the Health Survey for England (HSE) for 2013 revealed that among children aged 2–15, 16% of boys and 15% of girls were classed as obese, and 14% of both boys and girls were classed as overweight. Overall 30% of boys and 29% of girls were classed as either overweight or obese (Boodhna, 2013). Undoubtedly, this is a major national concern as an obese child is at double the risk of becoming an overweight or obese adult. Obesity is linked to a poor diet but the link between obesity and levels of exercise is stronger. Across the western world, health experts (for example, Berntsen et al., 2010; Jouret et al., 2007) are concluding that watching TV increases obesity, exercise decreases it, and establishing habits of exercise in preschool children is key to long-term success.
Establishing habits of exercise and being in the fresh air are achieved by being active and being outside on a regular basis, as in our case studies. As I have stated before (Knight, 2013: 19), neural pathways are established in the brain in response to activity and the myelinisation of those pathways – the process that makes that activity a part of the child’s way of being – occurs in response to repetitions of that activity. Being outside regularly and being free to stretch and grow makes a child want to be outside regularly and be free to stretch and grow. It is much easier to create these healthy ways of being while the brain is young and plastic. Once myelinisation has occurred, it then becomes harder to change the neural pathway, so that the older we are, the harder it becomes to change our habits. You can teach an old dog new tricks but it takes longer and takes more dedication. It is easier, healthier and happier to do it while children are very young.

We can hardwire children to be healthier and fitter by enabling them to spend more time outside being active. However, we do need to be aware of other hardwiring that is going on. Observe an 18-month-old with a computer tablet or a smart phone. You will soon see them stroke the screen to change the display. In our fast-moving world, each generation is biologically different from the previous one by virtue of the wiring that their environment has stimulated in their brains. It is this ability for our large brains to adapt and change that has made the human race so successful. Unfortunately, our bodies do not evolve as quickly. The human eye does not fully develop in most children until they are 7 or 8 years old, which is why children younger than this find it hard to judge the speed and distance of cars when learning to cross roads safely. Their eyes, and the bits of brain that interpret the visual messages, are developing both with age and in response to their experiences. Concerns are beginning to be expressed that too much screen time for anyone is a problem (The Vision Council, 2015), and some are suggesting that the next generation will not have the same ability to see at a distance just because they have not spent long enough as a child looking into the distance – something called ‘computer vision syndrome’ in the USA. It is only possible to look into the distance when you are outside and can see across a landscape, or are looking through a window at that landscape. This is not to advise wholesale rejection of new technology – apps to identify natural objects from ladybirds to constellations can be both useful and educational. But, as so often in life, moderation and consideration of outcomes need to be minded.

In summary, young children need to spend regular and prolonged periods of time outside in natural surroundings in order to be healthy, to develop fully and to establish habits that will keep them healthy as adults. These
are just the reasons for creating the best healthy human machines from the raw material we are born with and giving them the best chance of staying healthy. However, we are already faced with difficulties in achieving these outcomes. Whilst children are happy to be outside in all weathers, many adults are not. A feature of both case studies is the dedication of the adults to creating these amazing places. As Claire Warden has said,

> The most important aspect of learning with nature is the adult views on what nature offers children, and whether the practitioners and parents are motivated by nature themselves. In some environments, the adults have no residual memory of making mud pies, petal perfume, or a den. If a team does not have an ‘inner glow,’ what will they draw on when the rain comes down or the challenge of delivery of curriculum seems to be more important than being outside? (Warden, 2015).

As in Auchlone, Caroline Watts from the Forest Kindergarten Sevenoaks has created her environment from her love and passion for nature, and is supported by staff who are equally passionate about nature and about children. Between them, her team has a shared knowledge of early years care and education, of bushcraft and of outdoor cookery and crafts. They don’t all know all of these things; an aspiring manager in any business or industry does not expect to know it all themselves but they ‘know a man who does’—in other words, they will pull a team together that has the requisite skill set. Some of those skills will have been rooted in childhood experiences, the memories Claire cites that have inspired them to offer the same or similar experiences to the next generation. Unfortunately, there seems to be at least one generation, possibly two, in the UK, where the majority of people did not have those rich outdoor experiences as children.

Bird (2007) identified how the ‘right to roam’ in childhood has declined in four generations, and the subsequent effects on children’s participation in their natural surroundings. The children he observed typically spent their leisure time indoors, in their gardens or at clubs and leisure venues. These are the children who will now be training to work in our daycare settings, and without explicit experiential education it will be hard to ensure that the children they care for will have the outdoor experiences they need. In the graph in the introduction (Figure 0.2), it can be seen that training in Forest School is starting to become a part of some undergraduate programmes. For the most part, this is found in training programmes for early years educators, but often the modules are optional, and so the spread of experiential knowledge is to a self-selecting group of students. We will return to this issue in Part 2.
GOING FORWARD

REFLECTIONS ON FOREST SCHOOL

This chapter has emphasised the importance of regular and long-term access to the outdoors, the first principle of Forest School association (Knight, 2016). Reflect on what ‘long term’ means to you. If Auchlone is a Nature Kindergarten and Sevenoaks is a Forest Kindergarten, is there a difference in what happens there? In both settings, children can reflect on their activities around a fire. Is this Forest School? Consider the websites of each setting and reflect on their offering:

www.forest-kindergarten.co.uk/index.php
www.mindstretchers.co.uk/Auchlone%20Nature%20Kindergarten.cfm

IDEAS FOR PRACTICE: SMELL POTS

In the quote from Claire above, she spoke about making petal perfume. This is something most children will love to do. Encourage children to focus on their sense of smell by collecting natural objects in a pot, crushing them and sniffing the result. They can:

• test each other and see if they can guess what it is
• make their own perfumes by selecting their favourite flower petals and water. Again, this needs crushing to release the smell; this only smells pleasant for about 12 hours, unless you are going to heat the pots over the fire and distil the flower essence, when you can have a meaningful discussion about decay and consign the remains to the composting area
• use their smell pots to ‘illustrate’ a story – ‘we walked past the fir tree and then the blackberry bush before we got to the grass by the stream’ – four pots, each representing one sensory experience.

They will have more ideas, too. Enabling them to experiment could set their feet on the path to a love of science.

FURTHER READING

• A simple web search using the key words ‘natural, health, UK’ will link to services across the UK using nature to promote health, in adults as well as children. The
Natural Health Service on Merseyside at www.naturalhealthservice.org.uk/ links to a fact sheet about Forest School in the area. You will also find a link to a briefing paper from the Faculty of Public Health and Natural England, www.fph.org.uk/uploads/bs_great_outdoors.pdf, and other useful sites.

- Two papers on obesity have been cited (Berntsen et al., 2010; Jouret et al., 2007), and there are many more from across the developed world to read.
- A report to look at is on the changing relationship between children and nature, a report for Natural England entitled 'Childhood and nature: a survey on changing relationships with nature across generations' (Hilary, 2009), available via the Natural England website at http://publications.naturalengland.org.uk/publication/5853658314964992