



# The babyNENE Toolkit

PILOT

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# Contents

<b>Introducing babyNENE</b>	3
<b>Why do we need the babyNENE toolkit?</b>	4
<b>The babyNENE framework</b>	5
<b>How do I use babyNENE?</b>	6
<b>How settings have used babyNENE</b>	9
<b>Additional Resources</b>	11
<i>Babies Outdoors Website</i>	11
<i>Young Children, the Outdoors and Nature OpenLearn Course</i>	11
<i>babyNENE in Practice films</i>	12
Recommended plants for urban settings	13
Nature books for babies	13
Our reports	14
Our journal articles	15
Poster: <i>Ideas for nature engaging and nature enhancing practices with babies</i>	16
Poster: <i>Why being outdoors matters to babies and toddlers</i>	18

## Feedback

We are piloting this toolkit and would love your feedback about it so that we can develop it further. Please use the QR code [or this link](#) to access a simple online questionnaire to respond to questions such as:

- Have you used the babyNENE toolkit?
- How long did you use it for?
- What did you like about it?
- Have you any suggestions for how it could be improved?

Thanks!

Jo Josephidou, Nicola Kemp and Polly Bolshaw



# Introducing babyNENE

Developed with educators for educators

This toolkit has been put together by practitioners, researchers, experts from the Derbyshire Wildlife Trust, and an advisory group of consultants. It is aimed at those who care for the youngest children, whether in a formal setting or in family or community contexts.



Focuses on child and environmental wellbeing

Research tells us that human health and wellbeing is dependent on a healthy environment. The NENE in babyNENE stands for Nature Engaging and Nature Enhancing which we think sums up an attitude of mutual care and responsibility towards babies and the natural world.

Ways to 'be' outdoors rather than 'things to do'

Rather than a list of activities, the toolkit is more a suggestion of ways to be outdoors with very young children. It will help you think about how the environment can be enhanced both for young children and for biodiversity. It will also help you consider some of your practices and the dispositions you would like to encourage the children to develop.



# Why do we need the babyNENE toolkit?

## Giving babies opportunities to be outdoors

Many babies don't have regular opportunities to spend time outdoors. They rely on adults to take them outdoors and there are health and safety concerns. Children are encouraged to be physically active in the outdoors but not in the ways that babies are physically active. The message seems to be if you can't run and jump and climb, you belong indoors!



## Benefits to babies

There is growing evidence that it can be beneficial to babies in many ways to spend time outdoors. For example, it can be beneficial to their learning, to their wellbeing, to their health and to their overall development. At the same time it can benefit the people who look after and care for them.

## Benefits to the environment

Babies are capable of learning a caring attitude towards nature from a few months old, as happens in many cultures. If children 'grow up green' from a young age, then they may become adults who can look after our world.



# The babyNENE framework

This toolkit is based on a simple framework that focuses on four qualities – attentive, nurturing, responsive and questioning. We are calling it a pilot toolkit because we hope you will use it and then give us feedback to make it even better.

## Nature Engaging Practices

**Be attentive** to what babies are interested in, follow their lead and tune in to natural processes and cycles (weather, light, seasons etc.) and the engagement opportunities these might offer, including what could be learnt from these processes.

**Be a nurturer** of babies' interest in natural environments, observing and valuing the connections they make, helping them to understand how everything links.

**Be responsive** to babies' needs outdoors, value passive and slow ways of being outdoors to facilitate feeling, thinking, sleeping.

**Be a questioner**, observing how babies from different cultural backgrounds engage outdoors and be prepared to challenge dominant ideas of who belongs in nature.

## Quality

### Attentive



### Nurturing



### Responsive



### Questioning



## Nature Enhancing Practices

**Do attend** to what can be offered, rather than what can be received from nature.

**Do model nurturing behaviours** outdoors, showing how to protect and care for plants and animals, exploring what they need to flourish

**Do respond** to the needs of plants and animals in the local environment, becoming familiar with specific needs, creating wild spaces and increasing biodiversity.

**Do question** ideas about what counts as nature.

## How do I use babyNENE?

People who look after babies are very busy people! We want to offer you an uncomplicated way to think about being outside with them, whether that be in the setting's outdoor area, on a trip to the park or walking to the shops.

### Review your outdoor environment

A good way to begin would be to carry out a simple audit of your outdoor environment. Make a note of any natural elements you see e.g.

- birds
- plants including weeds
- insects
- trees
- puddles
- the weather.

Note any opportunities to 'green' part of your environment - the audit on the following page might help you to do this. And the babyNENE framework will also give you ideas. Of course this will depend on the space you have and any resource you need but think in terms of small steps, not big changes. Ask yourself 'how can I add a few more natural elements to the outdoor environment I spend time in with babies?'



## Auditing your outdoor space

- (a) Engaging babies with nature (adapted from [Kemp, Josephidou and Durrant, 2020](#))

Firstly, consider how much time babies spend outdoors:

How frequently are babies taken outside each day?	Never / Once a day / Twice a day / More than twice a day
What steps could you take to increase this?	<i>E.g. both AM and PM</i>
How long do babies spend outside each day?	No time / Up to 30mins / Up to 60mins / More than 60mins
What steps could you take to increase this?	<i>E.g. napping or eating outdoors</i>

Now think about what experiences you provide outdoors and what potential there is to introduce new ones:

Experience	Action needed
Exploring soil or sand	
Eating	
Growing plants	
Listening (e.g. to windchimes)	
Looking (e.g. at mobiles)	
Lying down	
Sleeping	
Smelling (e.g. flowers or herbs)	
Tasting (e.g. edible plants)	
Touching (e.g. textured surfaces)	

- (b) Enhancing nature (adapted from Derbyshire Wildlife Trust's School Grounds Habitat Audit)

Have a look at the below list and think about which of the following homes for nature you already have. Then make a note of which you could add to your outdoor area:

Homes for nature	Action needed
Bat boxes	
Bird feeders/ tables/ boxes	
Compost bins	
Dead wood	
Grass (long or short)	
Hedgehog house or leaf pile	
Insect homes	
Log or stone piles	
Plants in containers	
Vegetable or herb garden	
Wildflowers	
Flowerbed	

## Choose a quality word to focus on

Choose one of the words from the babyNENE framework to focus on for a few weeks. Think about how you can apply this word both to the children in your care and to the environment. You can see below some ideas.

### Ideas of Nature Engaging Practice

*Babies were interested to explore fallen leaves by touching and crinkling them in their hands. The practitioner brought leaves inside to give them further opportunities to explore.*

*The practitioner didn't worry about outcomes or providing lots of resources but took their lead from what the babies were interested in. For example, when walking to the beach, the adult didn't rush to get there, instead they stopped every time the children showed some interest in their environment and talked about what they could see.*

*A setting provided cribs outdoors for babies to crawl into when they felt sleepy.*

*A practitioner noticed how one baby didn't like to go outdoors and asked the parents why they thought this might be the case.*

### Quality

#### Attentive



#### Nurturing



#### Responsive



#### Questioning



### Ideas of Nature Enhancing Practice

*Babies learnt in age-appropriate ways about looking after plants and animals within the setting. They watched the practitioner engaged in this work, listened to the practitioner describe what they were doing and joined in as they could.*

*The practitioners planned for growing, eating and composting edible plants, involving the babies as much as possible.*

*The babies took breadcrumbs outside after snack time to leave for the birds. They looked in rock pools on the beach for signs of sea life.*

*Practitioners in an urban setting stopped clearing weeds that came through the patio area - instead they left them for the babies to explore.*

## How settings have used babyNENE

Here are three case studies to illustrate how some urban settings have used babyNENE to think about their practice with babies. You can see more details about these settings in our [“The Babies, they’ve noticed” report](#) on The Froebel Trust website.

### Chestnut Setting

The practitioners in this setting thought about how they could be responsive to nature itself fixing a butterfly house and a bird house to an external wall, and began replacing artificial plants with real plants. The manager said:

*“now we're actually really looking at our environments and how it actually does support the children's learning. And nature has definitely been brought back. We did have a lot of those fake plants. Now we're trying to move off that way, try and get some healthy fresh bits in.”*



Introducing these new elements encouraged butterflies, ladybirds and moths into the outdoor space. One practitioner shared:

*“The children continue to discover new natural wonders in the garden from smelling flowers, catching water drips to saying hello to a Lime Hawk Moth!” (Practitioner)*

One practitioner reflected on how considering babyNENE had supported them to question what counts as nature:

*“I found myself pulling up weeds that were going through the Astro turf before I saw them. And I'm like, well, why am I doing this? Let's show it to the child, you know, and this is actual nature trying to get through.”*



## Fir Setting

At Fir Setting, practitioners thought about how to be a nurturer of babies' interest in natural environments by planting flowers and herbs. One practitioner said:

*"We have these planters and we're focusing on herbs...they know now when you touch those leaves, this gives you a good scent on your hands. So, they will go there and gently touch it and smell it, that sensory engagement."*



The Deputy Manager also reflected on the need to centre babies' experiences when it comes to planning outdoor provision, questioning who is seen to belong outdoors:

*"When you are looking at the garden I think you do naturally plan for the older groups and babies kind of get a back seat... Definitely looking at adapting to suit the younger years is a good idea."*

## Yew Setting

At Yew setting, the babyroom lead spoke of how they had become more responsive to babies' needs outdoors, for instance by valuing passive ways of being:

*"We are so full of do, do, do, busy, busy, busy, you've got to be doing this, you've got to be doing that, but actually you can just lie on the grass and look at the sky"*



They invested in outdoor mats and cushions as well as board books about the natural world for babies to engage with outdoors.

## Additional resources for babyNENE

### Babies Outdoors Website



Our *Babies Outdoors* website contains lots of information and resources, including short films of what babyNENE could look like in practice:

[babiesoutdoors.co.uk](http://babiesoutdoors.co.uk)

### Young Children, the Outdoors and Nature OpenLearn Course

This free Open University course is aimed at parents/carers and practitioners. It will help you to start thinking about babies outdoors:

[open.edu/openlearn/education-development/young-children-the-outdoors-and-nature/](http://open.edu/openlearn/education-development/young-children-the-outdoors-and-nature/)

**Free course**

**Young children, the outdoors and nature**



Free statement  
of participation  
on completion



OpenLearn



## babyNENE in Practice Films

In November 2025 we visited a setting to video instances of babies spending time outdoors to explore what babyNENE might look like in practice. We found lovely examples of nature engaging and nature enhancing that centred around four themes, we've produced short (approx. 4min) videos to demonstrate each one, which you can find on our website - [babiesoutdoors.co.uk](http://babiesoutdoors.co.uk). We are hoping to add more films throughout the year.

### Being in nature together

Here we share four short clips that demonstrate the ways in which babies and their adults may spend time in nature together, e.g. by building a hedgehog habitat, reading a story, touching herbs or simply sitting on their adult's lap outdoors.



### Moving and learning in nature

This video demonstrates ways that babies move in nature, from lying, crawling, pulling themselves up and toddling.



### Using our senses in nature

In this video we share three clips evidencing how engaging with nature can offer babies the opportunity to taste, touch and smell.



### Noticing nature

This video gives four examples of babies noticing nature, including through listening to sounds, looking at leaves and experiencing the wind.



## Recommended plants for urban settings

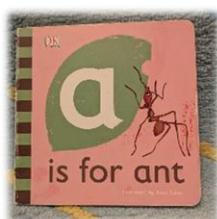
Derbyshire Wildlife Trust have provided us with a list of recommended plants for urban nursery settings. These have been chosen because of the ways in which they can offer babies opportunities for sensory engagement. We have a full list on our website, but our recommendations include:

- Lambs ear, known for its tactile qualities due to its soft, fur-like leaves
- Star jasmine, a climber with a sweet fragrant scent
- Alliums, which are vibrant colours with long stems
- Perennial herbs like rosemary and thyme, which are edible
- Lavender (e.g. *Imperial Gem*), which will attract butterflies, moths and bees that babies can watch and listen to.



## Nature books for babies

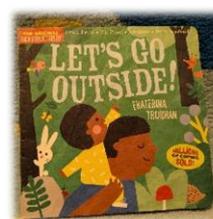
We have also produced a list of recommended board books about nature and the natural world, which practitioners have said have been beneficial both indoors and outdoors. A full list is on our website. It includes:



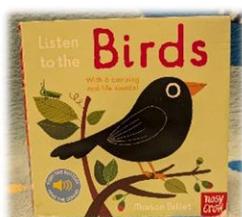
A is for ant



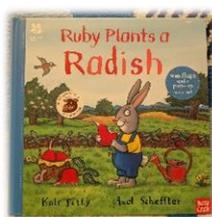
Bug Hotel (A Clover Robin Book of Nature)



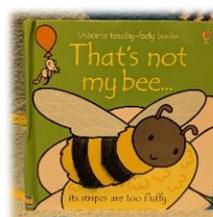
Let's Go Outside



Listen to the Birds



Ruby Plants a Radish



That's not my bee...

## Our reports

There are free research reports available to download from our website if you are interested in finding out about some of the research behind babyNENE.



### Where are the Babies? Engaging Under-Twos with the Outdoors

Nicola Kemp and Jo Josephidou



### Making connections with their World: Outdoor Provision for Under-Twos in Early Childhood Settings in Kent

Nicola Kemp, Ian Durrant and Jo Josephidou



### Developing an ECEC response to the global environmental crisis

Nicola Kemp, Jo Josephidou and Tansy Watts



### From Weeds to Tiny Flowers: Rethinking the Place of the Youngest Children Outdoors

Nicola Kemp, Jo Josephidou and Polly Bolshaw



### Looking for the Wow and the Wonder: Supporting Babies to be Outdoors in Urban Early Childhood Education and Care (ECEC) Settings

Nicola Kemp, Jo Josephidou, Polly Bolshaw and Linda Plowright-Pepper



### Making Memories Together... The importance of the outdoors and nature to babyroom parents

Nicola Kemp, Jo Josephidou, Ian Durrant and Polly Bolshaw



### "The babies, they've noticed": An evaluation of a Froebelian inspired nature-based pedagogy in urban babyrooms

Nicola Kemp, Jo Josephidou, Polly Bolshaw, Ian Durrant and Linda Plowright-Pepper

These are also available on our Froebel Trust project pages:

- *A life 'in and with nature?' An exploration of outdoor provision in baby rooms*
- *A Froebelian inspired nature pedagogy in urban babyrooms*

## Our journal articles

We have written several peer-reviewed journal articles that set out our research informed thinking. Many of these can be accessed for free.



Outdoor provision for babies and toddlers: exploring the practice/policy/research nexus in English ECEC settings  
Jo Josephidou, Nicola Kemp and Ian Durrant



Babies and toddlers outdoors: a narrative review of the literature on provision for under twos in ECEC settings  
Nicola Kemp and Jo Josephidou



A life "in and with nature?" Developing nature engaging and nature enhancing pedagogies for babies and toddlers  
Jo Josephidou and Nicola Kemp



Creating spaces called hope: the critical leadership role of owner/managers in developing outdoor pedagogies for infants and toddlers  
Nicola Kemp and Jo Josephidou



Developing nature engaging/nature enhancing pedagogies for babies and toddlers  
Jo Josephidou and Nicola Kemp



Tiny humans' outdoors: understanding the factors that mediate opportunities for babies and toddlers  
Nicola Kemp, Jo Josephidou and Polly Bolshaw



# Ideas for nature engaging and nature enhancing practices with babies

## Attentive



*Be attentive to what babies are interested in, follow their lead and tune in to natural processes and cycles (such as weather, light and the seasons.)*

- Explore fallen leaves by touching and crinkling them to see how they feel and listen to the noises they make.
- Bring leaves inside for further opportunities to explore them.
- Try to catch raindrops on your hand or your face.



*Do attend to your everyday outdoor environment and become familiar with what it offers.*

- Find somewhere comfy and pleasant to lie down on your back and look at the sky, clouds and nature overhead.
- Lift up stones, bark and leaves to search for minibeasts and hold them in your hand.
- Give yourself time to just stop and listen to what you can hear - birds, trains, cars, rain, wind...

## Nurturing



*Be a nurturer of babies' interest in natural environments, observing and valuing the connections they make, helping them to understand how everything links.*

- Don't worry about resources, let the child take the lead in what they notice in their environment and talk about what you can see.
- Take your time. Stop to look every time a child shows an interest in the world around them.



*Do model nurturing behaviours outdoors, showing how to protect and care for both humans and nature, exploring what they need to flourish.*

- Grow edible plants and herbs and involve the children as much as possible in tending, eating and composting these.
- Provide bird feeders and water for birds to bathe in.
- Tend to plants and herbs by watering them, in the morning if possible.



# Ideas for nature engaging and nature enhancing practices with babies

## Responsive



*Be responsive to babies' needs outdoors, value passive and slow ways of being outdoors to facilitate feeling, thinking, sleeping and sensory engagement.*

- Offer bottles, snacks and lunch outdoors.
- Take off your shoes and socks and walk around barefoot to explore the textures outdoors.
- Provide cribs or comfy spaces for babies to crawl into when they feel sleepy.



*Do respond to the specific needs of your outdoor environment, adding natural elements, creating wild spaces and supporting biodiversity.*

- Take breadcrumbs outside after snack time to leave for the birds.
- Use sticks and bark to make a home for an insect.
- Sow wildflower seeds to attract pollinators and provide a habitat for insects.

## Questioning



*Be a questioner, observing how babies from different social and cultural backgrounds engage outdoors and be prepared to challenge dominant ideas of who belongs in nature.*

- Take time to chat to parents about what they've noticed about how their child reacts outdoors.
- Notice if children appear to be reluctant to spend time outdoors and question why this might be.
- Start conversations with families about what the children have enjoyed doing outdoors at the setting.



*Do question ideas about what counts as nature.*

- If you spot weeds in your outdoor area, leave them there for the children to explore.
- Start a conversation about birds when you find a feather. How does it feel on the back of your hand?
- After dusk, go and look at the stars to see how many you can count. Sing a song about them.



## Why being outdoors matters to babies and toddlers

It's difficult to make bold claims about the benefits to babies and toddlers being outside and in nature because there's been so little research conducted. However, here are some of the benefits we've found:

### Child health

*Children's immune systems can be enhanced through contact with soil (Robinson and Barrable, 2023). Spending time outdoors can also decrease the risk of developing myopia (nearsightedness) (Huang et al., 2021)*

*Infants have been found to sleep longer outdoors than indoors, which may have beneficial impacts on their health (Tourula et al., 2010). Spending time in outdoor light in the afternoons can also help them sleep through the night (Harrison, 2004).*

### Sleeping, resting and being quiet

### Sensory engagement

*The natural environment supports multisensory engagement opportunities which the indoor environment is unable to offer yet which impacts greatly on healthy development (Hall et al., 2014).*

*Nature offers opportunities to encounter features such as uneven surfaces, slopes and stepping stones and to develop their ability to take supported risk (Kleppe, 2018; Murray and Williams, 2020).*

### Risk-taking

### Early language development

*The multi-sensory outdoor space may change very young children's speaking and listening practices and support their early language development (Hackett, MacLure and McMahon, 2021).*

*Enclosed outdoor spaces can help the youngest children feel emotionally and physically safe outdoors and support social connection (Hall et al., 2014; Moser and Martinsen, 2010; Hackett et al., 2021).*

### Social connection

### Moving freely and supporting physical development

*Having opportunities to be outside and explore natural features increases babies' and toddlers' physical activity (Gubbels et al., 2018; Morrissey et al., 2015; Ng et al., 2020; Dinkel et al., 2019).*

## Reference List for *Why being outdoors matters to babies and toddlers*

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Let's make babies more visible outdoors



*Image by Alice Marcelino for A Froebelian inspired nature pedagogy in urban babyrooms, licensed under CC BY-NC-ND*