



## Section 6

### Embedding care for our outdoor spaces into our experiences

#### 6.8 Gathering and using natural materials

##### Why this matters

Children love to play with natural materials such as sticks, stones, cones and shells. Foraging for food plants can make our snacks relevant to our children. By positively managing how these are gathered and used, we are:

- Enabling children to make and shape their environment. By moving and manipulating natural materials in many ways, children acclimatise to being in the space and develop a relationship with it.
- Helping our children learn the ecology of the places where they play – learning to identify different objects and recognising their play and wildlife value.
- Cultural links can be made by tapping into traditional games used with different materials, such as conkers. There are also stories, songs, recipes and activities associated with natural objects and plants – search online.
- Sharing with families and inviting them to tell of their experiences can also support learning about other traditions from other countries and parts of Scotland. For example, a *blaeberry* in Scotland is commonly known as a *bilberry* in England. Its Gaelic name is *braoileag ghorm* and its botanical name is *Vaccinium myrtillus*. Our culture is steeped in our natural heritage.

##### Seasonal play

The weather and seasons enable children to play with a range of loose parts at different times of the year. For example, apples and

brambles are harvested in Autumn, catkins and blossom appear in the Spring. Adapt [5.4 Our outdoor calendar](#) to ensure you plan for the natural events happening in your locality and the gifts they bring for your children. These can also link to other cultures such as blossom festivals in Japan.

Our imaginations are particularly important when supporting children outside. Simple provocations can create a world of possibilities as children explore. Imagine:

- A seed is asleep through the winter.  
 What could it be dreaming about?
- They have jackets and little houses to keep them safe.  
 What could be hidden inside?

Using the senses, art, colour and music in combination with natural materials and telling little impromptu stories stimulates the mind, body and heart.

**“Materials live in the world in multiple ways. They can evoke memories, narrate stories, invite actions, and communicate meanings. Materials and objects create meeting places. In early childhood education we gather around things to investigate, negotiate, converse and share. Materials... beckon and draw us in. Materials are not immutable, passive, or lifeless until the moment we do something to them; they participate in our early childhood projects. They live, speak, gesture and call to us.”**

(Kind, S., 2014)



## Section 6

### Embedding care for our outdoor spaces into our experiences

#### Building upon prior learning

- Ensuring children have plenty of time for free play with natural materials, in local greenspace as well as on-site
- Sharing ideas and discoveries about the materials we find: the joy of a leaf being dropped, etc
- Encouraging our children to notice the uniqueness of each object and its qualities. This precedes being able to identify and name them
- Listening to your children's stories of playing with natural materials and documenting this in creative ways
- Encouraging children to repurpose the natural materials, helping them understand how this is sustainable



The interplay between children and the loose parts, landscape, elements and seasons creates an ever-changing, growing, evolving play space, especially in natural environments that are loved and cared for. Furthermore, children experience a sense of freedom, space and autonomy that connects them to the land in an intimate way.

**(Loose Parts Play: A Toolkit, 2019)**

#### Reflective thoughts

- In what ways can we support our children to play freely whilst developing an awareness and care for the land?
- With our youngest children and those with different levels of maturity, what additional support may be needed?
- What plants and fungi do we need to recognise and why? Do we know the invasive species on our sites? Can we recognise potentially harmful plants and are we able to assess the level of risk they pose?
- It can be repurposed for loose play and construction activities. The children had fun using loose parts and various tools. They made ramps and learned new tool skills.
- See **4.6 Getting to know plants, animals and fungi that live in your outdoor spaces** for ideas to improve your wildlife knowledge. It's empowering to recognise different species and know about their history and value.



## Section 6

### Embedding care for our outdoor spaces into our experiences

#### Following children's curiosities

- Where possible, use natural materials *in situ* for playing with.
- If a child wants to keep a stick or other object, suggest they find a special space to keep it safe and to look for it the next time they come. If something has to be removed to comfort a child, then bring it back next time.
- Role model returning natural loose parts to where you found them. Can you remember?
- Moss and lichen can be fascinating for children – model how to gently stroke these species and talk about how they need to stay where they are growing. Have a look at [6.9 Dead wood spotting](#) for ideas and information.



#### Being aware

- Natural spaces such as woodlands, moorlands, inland water, the sea, wetlands are habitats for many different species. By removing natural materials and over-picking plants there are less food sources and homes for other species. For example, some species of crab live inside empty shells.
- Some species are invasive and non-native and takeover habitats. We need to know and recognise these and ensure our group does not spread these to other places.
- Some landowners have created gathering spaces in woods and other greenspaces where children can play more freely. Use these if they exist, even if there are less or different sorts of materials available.
- Some loose materials such as deadwood have particularly high biodiversity value. Parts of your site that have lots of deadwood may need to be left alone. Some, like lichen, are slow growing and best left undisturbed. Mirrors and magnifiers in a range of strengths can help children look closely and enjoy the beauty and wonder of these species.



## Section 6

### Embedding care for our outdoor spaces into our experiences

#### Making a positive difference

- Grow lots of plants in your outdoor space so you have plenty of loose natural materials and reduce the need to bring any in from elsewhere. This mitigates inadvertently transferring invasive non-native species, diseases and pests.
- Only pick common plants, berries, seeds, and fungi. Help your children to learn to gather only a little even if there is a lot around.
- Ideally, collect and use objects that have fallen to the ground rather than those still living and growing.
- Create habitat piles, especially deadwood piles in your immediate outdoor space. Seek advice from local outdoor professionals about the best place to put them.
- Create a group agreement about what is and is not okay to collect. Have a look at the Leave Less Trace Nature Play Principles in Out to Play, Appendix 3.
- Build a “virtual” collection – encourage your children to take photos of objects and of each other interacting with the materials.

#### Remember

- Select impact-resistant sites with a good level of biodiversity to begin with.
- Be patient especially with younger children or those with additional support needs as they learn what is okay to pick and what isn't and in what quantities. This skill and knowledge is only acquired through experience, role modelling and conversations with adults.
- Follow the [Scottish Outdoor Access Code](#) and national collection codes where they exist.
- Check with the landowner about what is okay to collect and the best places to play.
- If you purchase any loose natural materials for your outdoor setting, check that they have been sustainably sourced and harvested, ideally locally.

“Plants not only modify the climatic conditions and provide light shade, but the flowers, seeds and leaves produced by this living material can provide open-ended play props for children. Play spaces that incorporate vigorous low growing maintenance plants created sensory-rich play spaces.”

(Herrington and Lesmeister, 2006)



## Section 6

### Embedding care for our outdoor spaces into our experiences

#### Collecting codes

Be aware of guidance about sensible gathering practices and ensure you are not gathering any protected species:

- [Scottish Wild Mushroom Code](#)
- [Fungi Code of Conduct](#)
- [Wildflower Society Code of Conduct](#)
- [Scottish Fossil Code](#)

There are other codes too – have a look at the [Scottish Outdoor Access Code](#) website for more information.

“To avoid cross contamination and keep things simple, we have the rule ‘if you make it at Our Wee Garden then it stays at Our Wee Garden’ and you can choose where it goes. Also, if you find a leaf or twig outside of the Royal Botanic Garden Edinburgh you cannot bring it in to avoid cross contamination of plant biomatter. This rule is also an important learning experience for the children as they learn about how to take care of the plants in the National Collection.”

(Walsh, 2021)

“**HSCS 1.31** As a child, my social and physical skills, confidence, self-esteem and creativity are developed through a balance of organised and freely chosen extended play, including using open ended and natural materials.”



#### Find out more

- [Out to Play](#) has lots of advice about invasive species.
- [The Scottish Outdoor Access](#)
- [NatureScot](#) have lots of foraging advice. Download their [Foraging for Wild Plants](#) and [Food from Nature Learning Pack](#) which includes a foraging calendar.
- [Muddy Faces](#) have lots of ideas for foraging in their outdoor hub.
- The Conservation Volunteers have a [Dead Good Deadwood Survey](#) with free identification guides.
- Invasive non-native species. [NatureScot](#) has further info.
- Play Scotland (2020) [Playful Schools: Toolkit for Delivering Loose Parts Play in Covid-19](#) has risk benefit assessments and advice.



## Section 6


### Embedding care for our outdoor spaces into our experiences

#### 6.9 Dead wood spotting

Deadwood is a whole tree or part of a tree that has died and is beginning to rot.

**A “snag” is a standing dead tree.** They are used by lots of birds – woodpeckers make holes in them... can you find out why?



As the inside of a tree breaks down, it can become very crumbly and powdery.

 See if you can find any wee beasties helping the process.

**Deadwood stores carbon,** helps prevent soil erosion and 40% of woodland wildlife species are dependent on deadwood. It also supplies nitrogen, an important nutrient, releasing it into the soil.




As branches used to edge paths decompose, they become homes for many tiny creatures and fungi. The children must know this is inedible.

**Stumps** come in all shapes and sizes. Some have points, others have holes. Flat ones have usually been cut down.

 Can you see any faces in your stumps?  
 Have you a grumpy stump?

A **stumpery** is a garden full of stumps! They became fashionable in the Victorian era. Why not turn a stump into a mini garden in your outdoor space?

**Fallen deadwood** can be dead good for playing too:

 I wonder what's underneath a tree... Stable fallen trees are good for exploring roots. Get the magnifiers ready!  
 Some lichens love deadwood. How many different sorts can you find on just one stump or stick of dead wood?  
 A bed of moss is growing on top. I wonder who would like to sleep here?

#### 6.10 Animal allies

##### Dead, dying or injured animals

If you are worried about an animal, phone the **SSPCA** immediately: 03000 999 999. Use **what3words** app on a mobile phone to give the location of the animal. Let your landowner know if a large mammal has died of natural causes.

Any large dead bird with no obvious injuries may have died of Avian flu and should not be handled but reported in line with **guidance**.

When dead or dying wild animals are encountered, respond in ways that are sensitive and allow for spiritual conversations as well as the practicalities. Be attentive to the needs of any child who may be grieving the loss of a loved person or pet.

Be prepared for a range of discussions: about life and death; the linking to deaths of a pet or known person; what happens with dead bodies; how things rot and decay; how this creates food for decomposers; how some creatures die while others will be born and grow.

##### Being aware: Protected species and wildlife crime

Wildlife crime describes the illegal theft or harming of animals, plants and habitats, either in rural or urban areas.

Ask your landowner if there are any wildlife sensitivities on your site. You could seek advice from a local countryside or wildlife ranger too.

When you find animal homes such as nests, holes or dens make sure you stay away from them.