

# Section 6

# Embedding care for our outdoor spaces into our experiences



### 6.6 Trees and shrubs

### Why trees and woodlands matter

- Woodlands provide space away from the stresses and strains of life where children and educators can relax, be more physically active and feel calmer
- Trees provide abundant sticks and other free, biodegradable learning resources
- Trees are fun, good companions and when sufficiently mature, a place to climb, hide, swing and hang out
- Repeated experiences of playing in a known woodland helps develop an emotional connection which is often rekindled when children reach adulthood and actively choose to visit woodlands

#### Building upon prior learning

Playing in woodlands and around trees is the is "how" children learn to value trees. From the outset, support children to play with care for the trees in mind. This relies on modelling, conversations with, and support from, adults.

#### **Reflective thoughts**

- How do we model and interact with trees and shrubs to ensure an ethic of respect, care and reciprocity?
- What do our children think and feel about trees? How do we know this and what do we do with this knowledge?
- What have the trees witnessed on the land? What stories could they tell us? What are we learning from the trees and shrubs?

### $\quad \leftarrow \rightarrow$

# Section 6

"The group understand that we would never simply cut a tree down to make a den. They recognise that we look for a tree that was at the end of its life, or that was not growing as it should. We only use natural wastage – our 'gifts' from the woodlands."

#### (My World Outdoors, 2016)

### Trees and shrubs: useful information The green leaves are alive and...

- Catching raindrops, slowing down the speed they reach the ground
- Reducing wind speed and providing shelter not just in the trees but in the space downwind
- Absorbing carbon dioxide from the air;
- Releasing water back into the air along with oxygen
- Transforming energy from the sun into chemical energy for food webs
- Providing food and shelter for lots of animals: mammals, birds and insects



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

#### The roots...

- Help reduce soil erosion and aerate
  the soil
- Obtain water from the soil
- Bacteria that live on some roots convert nitrogen in the air into a form that the plant can use
- Provide strength and stability to the tree

#### Food and reproduction...

- Trees produce flowers, sometimes called blossom on fruit trees
- Flowers are a source of nectar and pollen for bees, wasps and other pollinators some can be eaten by people!
- The pollinated flowers grow into fruit: nuts, seeds and berries which grow back into trees and shrubs
- Nuts, seeds and berries are a source of food for many species including humans

#### Dead leaves, twigs and branches...

- Rot down and provide nutrients that are held in the soil to be re-used by the trees and other plants
- Are used by fungi, microbes and lichen as food and a place to live
- Are fun to use when we play
- Leaves can be used to make leaf mould that is good for growing seeds
- Piles of leaves provide shelter for animals like hedgehogs check before you dive in!

#### 

## **Section 6**

#### Trees and shrubs: practical actions

Looking after the trees in the spaces where we play can make a big difference to their health.

Ensure regular health checks are undertaken of trees in high use areas especially in your designated outdoor space, at least on an annual basis. Tree maintenance needs to be a priority here. Seek professional advice from a tree surgeon or arboriculturist.

**The weather and seasons**: strong winds, periods of drought, prolonged heavy rain, snow and ice may all add stress to a tree.

C Let's check our trees are okay when we arrive on site and we'll report any we are worried about.

**Land operations:** Always stay away from any site where timber operations or tree work is happening. When trees are felled from a site others can be left more vulnerable.

C Let's check which areas are still okay to use after. We also need to remember to never climb stacked wood as it's dangerous.

**Bark damage:** This can happen by stripping of bark, cutting into it or rubbing.

How can we care for the bark of living trees? It's their protective coat and if it gets damaged it may become sick and the tree could even die.

When choosing trees for climbing or for putting up tree swings, hammocks, ropes and slacklines, we need to pick species which can withstand the stress. See guidance on **play structures in woodland settings**.

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

Rope swings and structures need to be attached and used with care. Check with the landowner whether they need to be removed at the end of a session or can be left out. Always ensure these have riskbenefit assessments in place.

We can support children to climb trees with care. This **tree climbing guidance** can help.

- C Let's add scarves or soft tubing to protect the tree trunk and branches.
- O we know which trees can tolerate tree climbing and the addition of rope structures?

See this **video** capturing how Earthtime, Duffus approaches sustainable climbing at their setting.

**Soil compaction around tree base:** This is when the tiny holes in the soil that hold water and air are squashed out. This can prevent roots growing and reduce the oxygen levels in the soil. This makes the soil unhealthy and unhappy. It can also lead to increases in flooding as water can't soak in so easily and more water flows over the surface.

How can we protect the bases of the trees where we play especially in high use areas?

**Foliage stripping:** The removal of living leaves and breaking branches that are still growing on trees.

- Q We need to use fallen leaves, sticks and branches when we play, rather than remove from living trees and shrubs.
- $\bigcirc$  Which ones can we find to play with?

#### 

# Section 6

**Root exposure**: When roots are exposed above the soil, they're easily damaged; they can be worn and torn by foot traffic. Damaged roots can't do their job of collecting water and nutrients to support the tree.

I wonder how long the roots are and if we can follow them out from the tree?

**Insects and diseases:** that burrow, eat or destroy different parts of the plant.

In late spring or early summer, let's check if our trees are healthy and let our landowner know. See Forestry Scotland's guidance on tree diseases.



## Embedding care for our outdoor spaces into our experiences

### 6.7 Willow structures

#### Why willow matters

- It provides shade and shelter. It can be a special place where children can play and feel they have a sense of privacy.
- It improves the biodiversity of our outdoor space. There are a range of willow species native to Scotland. Osier willow (Salix viminalis) is commonly used to create structures. It is one of the first trees to flower in the spring, providing an early source of food for many pollinators.
- It creates interesting play structures and features. Living willow can be bent to make a range of play structures including screens, hedges, dens, tunnels and other play structures.
- Willows provide a fast growing and renewable supply of art and building material. The rods (withies) can be used to create sculptures, artwork, baskets.
- It can help with managing our climate. Willow likes damp places and holds a lot of water. It can help play a part in storm water management and contribute to capturing carbon.

#### Building upon prior learning

- Children have experience of playing with a willow structure and are interested in the pruning work needed to keep it healthy.
- Children find and play with willow sticks and/or willow baskets and other willow resources.
- Children use charcoal in their drawings and may be interested in finding out how it was made.