Nature Detective – Early Learning

Background information

Content information for educators (also suitable for parents): There’s been lots of talk and media attention over the past few years about children being “disconnected from nature”. Some would argue that children, and all humans for that matter, are nature, and therefore cannot be disconnected. Regardless, it is important for children to spend as much time in nature as possible, given the limitless opportunities nature provides for children to maximise their developmental potential, and build the range of skills they will need to be the best they can be.

Natures provides opportunities for children to develop their fine and gross motor skills, social and emotional skills, critical thinking and problem solving skills, communication and language skills, and lets them have fun while they do it. It has also been shown to reduce stress levels and support many aspects of physical and mental health.

Playing outside provides children with opportunities to engage with their environment and to understand that they are part of nature, not separate or outside of it. As children spend time experiencing nature they will learn to appreciate that the decisions they make impact on things around them, not just people but animals, plants and the natural systems that support us, both positively and negatively. This can be extremely empowering: what they do does make a difference.

Nature play promotes development of fine and gross motor skills,
including coordination, balance, agility, grip, and manipulation of materials. Nature Play also provides opportunities for building social and emotional skills such as resilience, confidence, cooperation, teamwork, concentration and attention. It’s much more fun to build a sand castle or a cubby with friends! But, there are also opportunities for quiet reflection and being alone, also very important in our hurried lives.

“Teaching children about the natural world should be treated as one of the most important events in their lives.” Thomas Berry

Definitions:

- Nature - is everything that exists in the world that has not been introduced by people, including plants, animals, landscapes and weather.
- Biodiversity - the diversity of all living things that form the web of life.
- Ecosystems - how living things interact with each other.
- Wild Space - a place where the impact of humans is minimised.

New words for children to learn:

- Nature
- Biodiversity
- Ecosystem
- Environment
- Senses

Activity - Exploring Nature

Ages - 0 to 2

What to do:
Preparation: Collect a range of natural materials and loose parts that children can explore with all of their senses. These may include large seedpods, herbs, clay, soil, water, sticks, bark, leaves, stones, shells, flowers, etc. You can put smaller items in jars, containers or small fabric bags to prevent them being swallowed. You can put holes in the lids so they can be smelled and perhaps shaken to see what sounds they make. Choose items of different sizes, shapes and textures.

Provide an opportunity for children to explore the collection of items. They may enjoy sorting them, tasting them, smelling them, creating music and touching them to explore different textures. You could place them all in a basket or arrange them on a table, or on the floor. It is great to explore these things inside but even better outside where senses are heightened. Try and stimulate as many senses as you can at the same time, this is when the deepest learning happens.

Try some messy play: clay, water, ice, sand and mud are amazing experiences for young children. These are generally full body experiences so have some towels and a change of clothes on hand. Provide some tools for children to manipulate the materials (cups, buckets, spoons, pipe, etc). You can also incorporate your natural materials into these activities for maximum awesomeness!

Tip: Consider how you might integrate natural materials into other activities, particularly inside. Use wooden toys, bring natural materials inside, indoor plants, or play-doh that incorporates natural elements such as sand or herbs.

Provocations:

- I wonder what sounds we can make?
- I wonder if all of these things smell the same?
- I wonder what this feels like?
- I wonder where this comes from?
- I wonder what happens if we add water?
- I wonder what will happen to the ice if we put it outside?
- I wonder where rain comes from?
Possible lines of development:

- Plant a sensory garden or herb garden.
- Plan an International Mud Day Activity.
- Go for a walk and experience nature near you.
- Encourage children to bring interesting natural items they find to explore together.
- Explore natural materials with mirrors or a light box.
- Explore more Cool Australia activities [Colours in nature]; [Sounds in nature].

Ages - 2 to 3

What to do:

Preparation: Attach some copies of the Nature Detective Sensory Scavenger Hunt Checklist to some clipboards and provide some magnifying glasses and pencils. Depending on your outside space, you may want to plant (or hide) some items for the children to discover.

Distribute the Nature Detective Sensory Scavenger Hunt Checklist to the children (either in small groups to work together, or individually). You may want to read through the list together first. Head outside and see what they find...

Children may bring items back to a table or central location for further investigation using magnifying glasses, or you may want them to leave items where they found them depending the nature of your space.

Provocations:

- I wonder what we can find in our yard?
- I wonder what the heaviest thing in our yard might be?
- I wonder what the loudest thing in yard is? Is it from nature?
- I wonder if there is something that smells good in the yard?
- I wonder what the most colourful natural thing we can find outside is?
I wonder if something rough can be slippery too?
I wonder what the smallest thing we can find outside is?
I wonder what we can find that animals might use?
I wonder if we can find anything alive outside in our yard?

Possible lines of development:

- Try other scavenger hunts – as many things as you can starting with the same sound; from A – Z; same or different colours, textures, smells, etc; how many things you can find in a certain time.
- Take your scavenger hunt beyond the fence and see what different things you can find. Explore some nature near you.
- Make something with your discoveries (nature art and craft activities, fairy or animal houses, dry collages, pet rocks, etc.)
- Plant a “Bean Teepee” or create a tunnel from sunflowers.
- Explore natural materials with mirrors or a light box.
- Explore Minibeast and bug using this resource: Bugs in the Garden
- Explore different materials using this resource: Natural versus Not Natural
- Take outdoor learning further with this resource: Colours in Nature

Ages - 3 to 5

What to do:

Preparation: Attach some copies of the Nature Detective Mission to some clipboards and provide some magnifying glasses, pencils, crayons, etc and extra paper for rubbings and drawings. Provide paper bags or baskets for collecting found items. Depending on your outside space, you may want to plant (or hide) some items for the children to discover, or head out to a park or bushland reserve near you.

Distribute the Nature Detective Mission to children (either in small groups to work together, or individually). You may want to read through
the list together first. Head outside into the yard, or even better find some nearby nature, and see what they find...

They may bring items back to a table or central location for further investigation using magnifying glasses, or you may want them to leave items where they found them depending the nature of your space. They could also take photos or draw what they find and do some research identifying birds, plants, bugs or what animals like to eat or where they live, etc.

**Provocations:**

- I wonder what types of living things we have in our yard?
- I wonder what plants and animals need to live?
- I wonder how you feel when you play outside?
- I wonder if there are things that are not natural outside?
- I wonder if more animals could live in our yard?
- I wonder what things we can find in nature that are good for people?
- I wonder how this place would be different in summer / winter / spring / autumn?
- I wonder if there is anything we could do to protect / look after nature?
- I wonder why nature (or an element of nature) is important?

**Possible lines of development:**

- Create habitat gardens in your yard – what do different sorts of animals and plants need?
- Plant and animal classification (birds / insects / mammals / marsupials / flowering plants / annuals / perennials / etc.)
- Develop a natural play space in your yard.
- Go on an excursion to a local bushland area, national park, beach, or other wild space near you.
- Notice changes that happen in nature as the seasons change.
- Explore nature in all weather.
- Explore elements found in nature (water, air, fire, wind).
• Further exploration of trees, rocks, seeds, soil, etc.
• Indigenous / cultural connections to plants and animals.

Evaluation

Complete an analysis of learning listing evidence about:

<table>
<thead>
<tr>
<th>Belonging</th>
<th>Finding something of interest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication</td>
<td>Expressing an idea or feeling</td>
</tr>
<tr>
<td>Exploration</td>
<td>Engaging with challenges and</td>
</tr>
<tr>
<td></td>
<td>persisting when difficulties arise</td>
</tr>
<tr>
<td>Well being</td>
<td>Being involved</td>
</tr>
</tbody>
</table>

Embedding into daily practice

• Use natural materials and loose parts to encourage creative thinking in all aspects of your program (inside and out).
• Get involved with a local Friends Group or consider participating in looking after an area of nearby nature through tree planning activities like National Tree Day or Clean Up Australia Day.
• Create a sensory, indigenous, native, habitat or edible garden with children and families.
• Go outside in all weather, include this in your philosophy and policies.
• Consider an ongoing nature program (bush, forest or beach kinder / playgroup).

For more information on how you can help our environment, or to make some suggestions of your own, please go to www.coolaustralia.org

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