



Our Ecology Curriculum

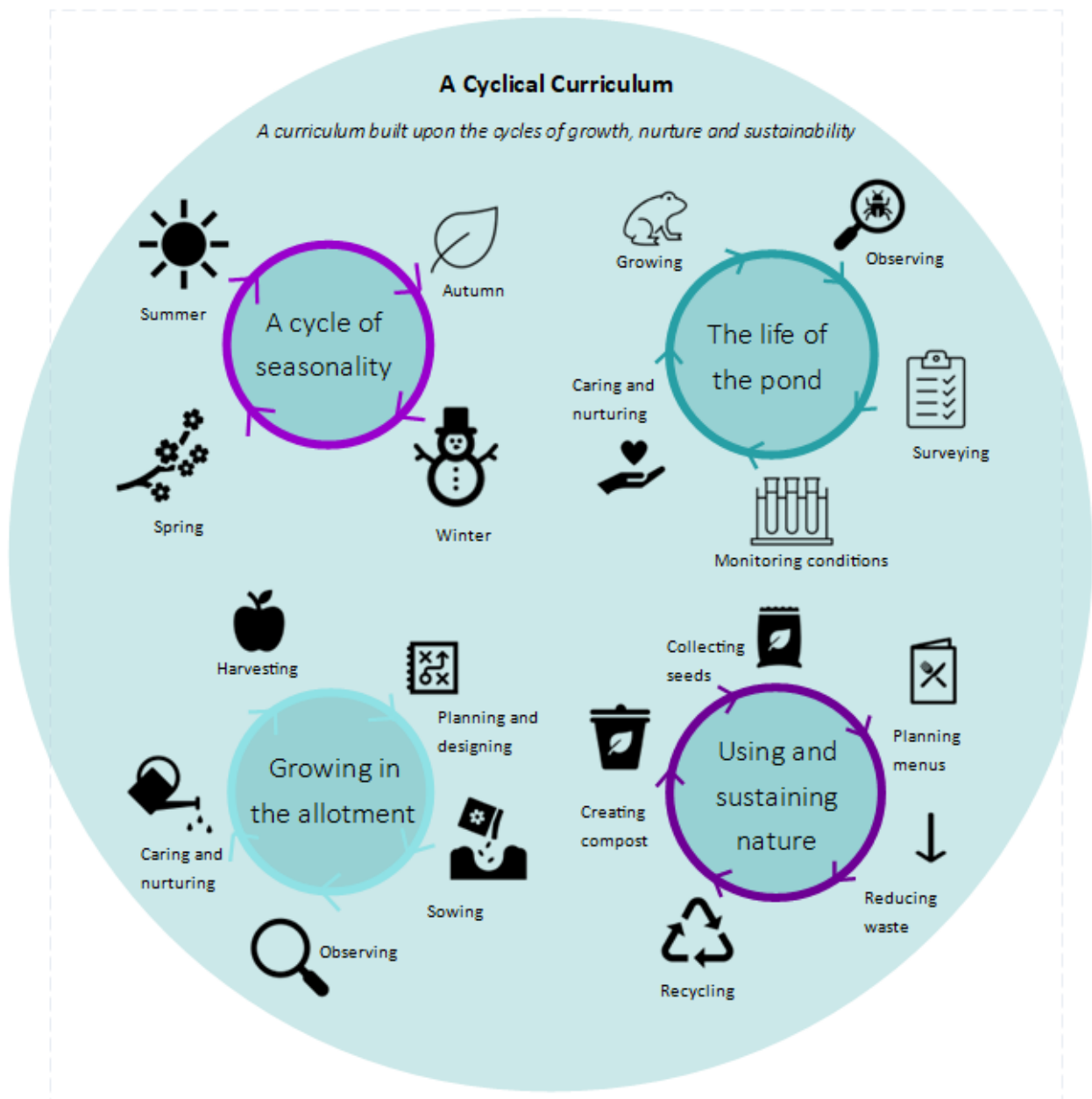
Aims:

- To nurture a deep sense of care, connection, and responsibility for the natural world.
- To spark curiosity and wonder about nature and how it works.
- To make purposeful and progressive use of our outdoor spaces for learning and discovery.

Research base:

- The British Ecological society [Educators - British Ecological Society](#)
- The Ministry of Eco Education [Ministry of Eco Education | Curriculum](#)

Purpose:



Our Eco Curriculum is thoughtfully designed to cultivate in pupils a profound sense of connection to, and responsibility for, the natural world. It is not simply an outdoor learning programme repurposing nature to serve other academic ends. Rather, it complements and enriches the school's science, geography, and PSHE curricula, anchoring our community's learning in the life of our school grounds. Through this integration, pupils develop not only knowledge and skills, but also a lasting relationship with the environment that surrounds them.

At the heart of our ecology curriculum is a **shared commitment to stewardship of the land**, where every member of the school community - pupils, staff, and families - has a role to play. We believe that caring for our school grounds fosters a sense of collective responsibility, deepens connections to the natural world, and builds lifelong habits of environmental care. From planting and maintaining habitats to monitoring wildlife and seasonal changes, every action contributes to the flourishing of our local ecosystem. Through collaborative projects and everyday practices, pupils learn that small efforts, when multiplied across a community, can result in meaningful and lasting change. Stewardship is not just a lesson - it's a lived experience that empowers children to become thoughtful, active custodians of their environment.

Our approach to stewardship is intentionally **cyclical**, reflecting the rhythms and patterns of the natural world we aim to protect. Just as ecosystems evolve through seasons - growth, decay, dormancy, and renewal - our ecological practices at school follow a continuous cycle of observation, action, reflection, and care. Tasks like composting, harvesting, planting, and maintaining habitats happen in recurring phases, allowing pupils to witness the interconnectedness of life and the importance of long-term commitment. This cyclical structure fosters resilience, patience, and a deeper appreciation for nature's tempo, reinforcing the idea that nurturing the environment is not a one-time effort, but an ongoing journey we share together.

Progression:

		Autumn - Harvest	Spring - Signs of Growth	Summer – In Full Bloom
EYFS	Hobbit/ forest area	<p>To create resources using sustainable sources from the local environment.</p> <p><i>Find autumn berries and crush them to make paint</i></p>	<p>To create a natural fertiliser.</p> <p><i>Make a fertiliser ‘tea’ using plant material and soaking it in water to use on plants in the summer term</i></p>	<p>To observe in my local environment things I had not noticed before.</p> <p><i>Find leaves of different shapes and colours</i></p>
	Pond	<p>To observe living things in a natural environment.</p> <p><i>Look at pond and observe what you can see living in and around it</i></p>	<p>To observe living things in a natural environment and comment on changes.</p> <p><i>Look at pond and observe what you can see living in and around it and compare to autumn</i></p>	<p>To observe living things in an unfamiliar natural environment.</p> <p><i>Take sample of pond water to observe wildlife living in water</i></p>
	Allotment	<p>To plan a garden.</p> <p><i>Plant bulbs e.g. daffodils, tulips, crocuses</i></p>	<p>To observe the effect of my garden planning.</p> <p><i>Enjoy flowering bulbs</i></p>	<p>To grow my own food.</p> <p><i>Grow potatoes. Remove bulbs after foliage has died back for storage</i></p>
KS1	Hobbit/ forest area	<p>To identify trees in my local area.</p> <p><i>Label trees and draw their leaves while they are still in leaf</i></p>	<p>To create an ecological calendar.</p> <p><i>Observe blossom and leafing out dates Enjoy flowering bulbs Draw buds and add to leaf drawings</i></p>	<p>To create an ecological calendar.</p> <p><i>Observe leafing out dates Observe flowers of flowering trees e.g. elder and add to leaf and bud drawings</i></p>

	Pond	<p>To observe plants in different local microhabitats.</p> <p><i>Survey water plants and learn names of aquatic plants early in term ie late summer/early autumn</i></p>	<p>To observe changes in plants in different local microhabitats.</p> <p><i>Survey water plants and learn names of aquatic plants – compare to previous term</i></p>	<p>To observe animals in different local microhabitats.</p> <p><i>Pond dip and look for different animals and plants living in pond</i></p>
	Allotment	<p>To create natural fertiliser.</p> <p><i>Maintain compost area</i></p>	<p>To plan a flower and vegetable garden.</p> <p><i>Start hardy seeds indoors e.g. peas Plant bulbs e.g. nerines, lilies</i></p>	<p>To grow food.</p> <p><i>Grow from seed: Beetroot, radish, (early) carrot, peas, broad beans</i></p>
LKS2	Hobbit/ forest area	<p>To harvest and prepare food.</p> <p><i>Harvest and prepare apples from the orchard/field Harvest edible berries</i></p>	<p>To describe the ecology of my local area.</p> <p><i>Make series of measurements of light and soil type/characteristics in different areas of school</i></p>	<p>To increase biodiversity in my local area.</p> <p><i>Set up and maintain habitats e.g. log piles, insect hotels Plant overwintering onions from sets</i></p>
	Pond	<p>To survey aquatic life.</p> <p><i>Pond dip and make a quantitative survey of invertebrate life</i></p>	<p>To survey aquatic life.</p> <p><i>Pond dip and make a quantitative survey of invertebrate life e.g. March – water beetles and pond skaters</i></p>	<p>To survey aquatic life.</p> <p><i>Pond dip and make a quantitative survey of invertebrate life – compare with spring and autumn e.g. fly larvae damselflies</i></p>
	Allotment	<p>To increase biodiversity in my local area.</p> <p><i>Set up and maintain habitats e.g. log piles, insect hotels Plant overwintering onions from sets</i></p>	<p>To survey aquatic life.</p> <p><i>Pond dip and make a quantitative survey of invertebrate life e.g. March – water beetles and pond skaters</i></p>	<p>To grow herbs.</p> <p><i>Grow annual herbs from seed (coriander, cumin, chives, parsley), tend perennial herbs (rosemary, mint, curry plant, oregano, sage) Harvest onions</i></p>

UKS2	Hobbit/ forest area	<p>To maintain habitats for animals in my local environment.</p> <p><i>Check and maintain school bird boxes, add more boxes if needed</i></p>	<p>To survey invertebrates in my local area.</p> <p><i>Comparative invertebrate survey in different areas – collate results with Year 3/4 to spot patterns</i></p>	<p>To investigate rarely-seen local animals.</p> <p><i>Set up and review a motion-capture camera.</i></p>
	Pond	<p>To maintain an aquatic habitat.</p> <p><i>Maintain pond level without disturbing hibernating frogs at bottom of pond, ensure there are hibernation sites for any newts – ie small piles of leaf litter or log piles that are cool, damp and sheltered. Bury a perforated, used growing bag in a shallow trench, cover with grass clippings then add a layer of leaves and twigs.</i></p>	<p>To maintain an aquatic habitat.</p> <p><i>Nurture tadpoles and clean pond, checking chemical balance</i></p>	<p>To maintain an aquatic habitat.</p> <p><i>Observe metamorphosis and activities of amphibians</i></p>
	Allotment	<p>To maintain soil health over winter.</p> <p><i>Plant cover crops such as vetch/field beans to protect growing area Plant overwintering greens e.g. mizuna, pak choi, Chinese cabbage, komatsuna, mustard leaf</i></p>	<p>To tend a vegetable garden over winter.</p> <p><i>Maintain and harvest overwintering greens. Start tender plants indoors e.g. tomatoes</i></p>	<p>To grow summer vegetables.</p> <p><i>Grow tender plants in the greenhouse, save seed of most successful for following year Grow leafy crops in a bed e.g. lettuce, spinach, leaf beet</i></p>

Glossary:

Ecology: *The scientific study of how organisms interact with each other and their environment. It examines relationships between living things, ecosystems, and factors like climate, population dynamics, and biodiversity.*

Environment: *The surroundings or conditions in which an organism lives, including both natural and human-influenced factors like climate, soil, water, air, and other living organisms.*

Fertiliser: A substance, natural or synthetic, added to soil or plants to promote growth by supplying essential nutrients like nitrogen, phosphorus, and potassium.

Harvest: The process of gathering mature crops or resources from the land when they are ready for consumption or storage. It can apply to agriculture, fishing, or even wild foraging.

Microhabitat: *A small, specific area within a larger habitat that provides unique environmental conditions for certain organisms. Examples include a rotting log in a forest, a tide pool on a rocky shore, or the underside of a leaf.*

Overwintering: The process by which organisms survive the winter, often by hibernation, dormancy, migration, or adapting to colder temperatures. It is common among plants, insects, and animals.

Seasonality: *The characteristic of certain events, behaviours, or phenomena occurring in regular cycles linked to seasons. This can apply to climate patterns, animal migrations, agricultural cycles, or even economic trends.*

Stewardship: *The practice of responsibly managing and caring for the natural environment, often with the goal of preserving ecosystems for current and future generations. It involves active participation and long-term commitment to nurturing and protecting the land and its living systems.*

Sustainable: *The ability to meet current needs without compromising the ability of future generations to meet theirs. It often refers to practices that minimize environmental impact, conserve resources, and promote long-term ecological balance.*

Principles of regenerative use of the land

The school should compost as much as regulations allow i.e. plant material that has died or been cut back, vegetable scraps from plants grown in the allotment, fruit skins/cores from free fruit scheme.

The school should not use peat, perlite or vermiculite.

No single use plastic should be used – plastic tools (including seed trays, plant pots etc.) should be bought that are sturdy enough to last a long time, and if compost or potting soil are needed, any plastic bags that it comes in should be recycled.

The school should seek to use organic seeds and bulbs where the cost is not prohibitive.

Plants grown should be open-pollinated cultivars, and children should save seed from them wherever possible to sow the next year. Over time we should end up with 'Fulbourn fantastic' varieties that grow well in our area.

No industrial products should be used, including all pesticides and herbicides, artificial fertilisers.