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# What is Nature Study?

At its core, nature study is learning about the natural world through the five senses.

Nature study is a **direct personal experience**. The children feel the flower's ridged petal, see the birds soaring above, smell the ocean breeze, taste the freshly picked garden vegetable, and hear the insects chirping. While reading about a subject is beneficial, experiencing it makes the knowledge real and lasting and theirs. Today's technology gives easy access to scientists, well-written books, and high-quality videos, yet nothing replaces real-life encounters to build interest and understanding.

Nature study utilizes **observation**. Students use their five senses- fueled by curiosity- to notice and learn. Educators should prompt and guide, but the children should be discovering the information for themselves. This exercise builds the skills of careful attention, thorough examination, and self-direction. These abilities are foundational to scientific study at all levels.

Nature study is about **connection**. Given the time and space to do so, we instinctively relate new information to what we already know. While observing a specimen, students may categorize, compare similarities, contrast differences, or remember something previously studied. With each nature study experience, students build an understanding of how nature works. In contrast, the analyzing process is overrun when the students are fed information and are required to parrot it back. Learning often becomes shallow and students become disengaged.

Nature study results in **recording**. The children sort through what they observed about the subject, connect it to what they already know, and communicate it on the pages of their blank nature journals. As they convey the information with their own words and drawings, learning solidifies into deeper understanding.

## Nature Study Lessons

Educators typically focus on one or two nature topics per term, such as birds, or wildflowers and trees. They read aloud a book on the topic to lay foundational concepts. Each week, students are taken outdoors to **experience** the subject firsthand. It may be in the form of an object lesson or an encounter with it in its natural habitat. They learn all they can about the specimen by **observing** it with their senses. The teacher may ask prompting questions to help them notice more and **connect** it to their existing knowledge. The students then **record** what they learned in their nature journals using written notes, drawings, diagrams, and counts/measurements.

# Not Only Nature Study

Though a significant part, nature study should not be the sole source of science education. Charlotte Mason had nature study as a core practice in her schools but advised, "The study of science should be pursued in an ordered sequence, which is not possible or desirable in a walk." (School Education, 237). A science curriculum should also be in place to cover necessary concepts systematically, including those beyond personal observation and the local environment. Many curriculums have a comprehensive plan that uses books, videos, experiments, and object lessons to accomplish this.

knowledge, and is most likely already recorded in books; but, for us, it is new, our own discovery, our personal knowledge, a little bit of the world's real work which we have attempted and done. However little work we do in this kind, we gain by it some of the power to appreciate, not merely beauty, but fitness, adaptation, processes. Reverence and awe grow upon us, and we are brought into a truer relation with the Almighty Worker."

Charlotte Mason "Ourselves"



#### Wildflowers

Wildflowers are plants that grow readily on their own without human tending. In places they are not wanted, they are called "weeds" and people fight mightily to prevent them from overtaking the lawn and garden. Wildflowers are generally hardy and self-propagating, feeding hosts of insects and providing shelter for small mammals. You may find wildflowers in sidewalk cracks, along roadsides, in vast fields of untouched natural areas, and in any otherwise unused land. Wildflowers are proof that there is beauty everywhere.

#### **Field Guides:**

National Audubon Society Field Guide to Wildflowers: Eastern Region

National Audubon Society Field Guide to Wildflowers: Western Region

Books (Available free on archive.org):

The How and Why Wonder Book of Wild Flowers by Grace Ferguson

Look at a Flower by Anne Ophelia Dowden

Travelers All: The Story of How Plants Go Places by Irma Webber

Seeds and Seed Travels by Bertha Morris Parker

Little Wanderers by Margaret Morely

Weeds by Dorothy Childs Hogner

# Study 12

Learn to recognize 12 different kinds of wildflowers

Choose a new wildflower to study each week over the term/semester. Use a field guide or nature ID app to learn its name. Draw the bloom in your nature journal and write up everything you notice about the plant.

You could press the flower for two weeks and then mount it in your journal beside your entry or include it immediately by carefully flattening it and sealing it on the page with packing tape.

- Where was the wildflower found? About how many of this type are living there?
- Count and measure the plant. How tall does it stand? What is the diameter of the flower head? How many petals does it have?
- Look at another wildflower of this same type. Are they identical? Does this plant always have the same amount of petals? Do they always have the same number of leaves?
- Look at the leaves. How many leaves are on each stem? Are the leaves opposite each other like a mirror, do they alternate like footsteps, or are they all in a bunch? Are the leaf edges smooth, zig-zagged, or rounded lobes?
- · Where are the seeds located? What do they look like? What is inside each seed?

## Youngest to Oldest

Witness the life cycle of a wildflower bloom

Visit a patch of wildflowers and see if you can find examples of the full bloom cycle for one kind of flower. First, look for a young plant that has not opened its blooms yet. Next, search for a flower that is just starting to emerge. Then, find an example of a fully open, mature flower. Afterward, see if there are any fading blossoms. Finally, look for a plant that has lost all its petals.

In your nature journal, draw or press an example of each stage as a timeline of the bloom cycle. Under each, write your observations.

- What does the flower head look like before it has blossomed? How can you tell a blossom is developing?
- How do the petals open: all at once or petal by petal? Which petals open first?
- What does the fully open flower look like? What is in the center? What does this flower smell like? Does it smell differently than an immature, unopened bloom?
- How can you tell when petals are dying? What happens to them? Can you see any fallen petals on the ground?
- Once the petals are gone, what does the flower look like? Can you tell where the seeds are?

### Wildflower Field Guide

Become familiar with all the wildflowers on a nature trail, practice using a field guide to identity wildflowers, observe closely to decide between similar types of flowers

Create a custom wildflower field guide for a favorite nature trail. Walk along slowly and spot wildflowers. If picking is allowed, select one of each type you come across and mount it to a page in your nature journal. Carefully flatten the bloom and cover it with a smooth layer of packing tape. If picking is not allowed, create an accurate drawing instead. Use a nature app or field guide to identify the wildflower's name and label it in your journal. Look closely at the number of petals, the shape of the leaves, and the measurements to ensure you have chosen the correct variety. Date the top of each page to have a record of when these flowers bloom.

If there are many different wildflowers in the area, this could be a project you work on a bit each week. Also, some wildflowers are only in bloom for a short time. You could do a new field guide for each season.

When finished, you will have gotten to know many wildflowers and produced a beautiful collection of those that live there. Share this guide with grandparents or friends and invite them to come along on your next hike to spot these flowers for themselves along your trail.

is refreshing, wind braces us up, snow is exhilarating; there is really no such thing as bad weather, only different kinds of good weather."

John Ruskin

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The photographs in this book are of her own kids taken while on nature study outings.

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