

# *Nature Study*

## *Three Steps to a Better Experience*

- Learn how to offer age appropriate nature study in your family
  - With tips and printable for advanced students



**Written by Barbara McCoy**

**Author of the Outdoor Hour Challenges**

**<http://handbookofnaturestudy.blogspot.com>**



# The Three Stages of Nature Study

<h2>Observation</h2>  <p>Beginners and young children will be working in this column the most. Feel free to spend lots of time in casual observation.</p>	<h2>Reasoning</h2>  <p>More advanced students will spend a portion of their time in this column.</p>	<h2>Expression</h2>  <p>Offer the activities in this column as your child has interest.</p>
<ul style="list-style-type: none"> <li>• Most of your nature study time should be dedicated to making observations.</li> <li>• Use all your senses.</li> </ul> <p>Advanced Students: Spend some time in quiet activities like sitting, watching, and moving slowly.</p>	<p>Investigate your subject, gathering data for analyzing more deeply.</p> <ul style="list-style-type: none"> <li>• Compare</li> <li>• Relate</li> <li>• Infer</li> <li>• Experiment/Test</li> </ul>	<p>Decide what kind of nature journal you will create:</p> <ul style="list-style-type: none"> <li>• Sketchbook –bound</li> <li>• Notebook pages –pre-printed</li> <li>• Scrapbook with images – paper or digital</li> </ul>
<p>Experience the Outdoors</p> <ul style="list-style-type: none"> <li>• 15 minutes</li> <li>• As often as possible</li> </ul>	<ul style="list-style-type: none"> <li>• Spend time trying to see details before you record your experience in your journal.</li> </ul>	<p>Kinds of Journals:</p> <ul style="list-style-type: none"> <li>• Single place</li> <li>• Trip</li> <li>• On-going</li> </ul>
<ul style="list-style-type: none"> <li>• Careful observation will lead to better expression.</li> <li>• Pay attention—learn to focus.</li> </ul> <p>Advanced Students: Take field notes with details.</p>	<ul style="list-style-type: none"> <li>• Research questions using a field guide.</li> </ul>	<p>Gather your supplies.</p> <p>Advanced Students: Portable and small enough to take with you.</p>
<ul style="list-style-type: none"> <li>• Allow time for following “rabbit trails” to see where you are led next.</li> <li>• Divide time between structured and unstructured.</li> </ul>	<ul style="list-style-type: none"> <li>• Go beyond and look deeper for details.</li> <li>• Return to observe again if necessary.</li> </ul>	<ul style="list-style-type: none"> <li>• Allow time to journal outdoors where you can record as many details as possible.</li> <li>• Keep track of unanswered questions for future learning.</li> </ul>

# *How to Use the Three Steps to Nature Study*

## **Step One is Observation.**

This step includes your actual outdoor time with your children and can include structured and unstructured time. For younger children and beginners, step one is where you will want to devote most of your nature study time. You can have a general idea of what you will be observing, keeping on the lookout as you go outside (like with a specific topic suggested in the [Outdoor Hour Challenge](#)). You can also spend your time outdoors in a special place during a field trip or on vacation, exploring and making observations about whatever interests your child.

\*Make sure that your child has time to have actual face to face time with the subjects of your nature study. This personal contact and observation is not to be replaced with books or videos. Real nature study happens when the child has made the observations himself.

As the child matures and/or is interested, move on to Step Two.



## **Step Two is Reasoning.**

This step is where you will apply your thinking abilities, going beyond what you observe with your senses. Use the observations you have made to go deeper by comparing, contrasting, and asking questions about what you learned through your senses. Younger students can gradually be helped to use reasoning if the parent/teacher guides them through the process. Gentle questions, leading thoughts, and help expressing what the observations mean can be used to help the student learn how to reason. This is where advanced students will focus their time by asking themselves questions and trying to discover the answers. For older students this step will include learning to classify the subjects.



Step Two can lead back to Step One if you need to gather additional data to complete your study.

My new More Nature Study ebooks suggest activities for advanced students: [Book 1](#) and [Book 2](#) (more to be released in 2012).

## **Step Three is Expression.**

This is where you take the observations made in Step One, the thoughts gleaned in Step Two, and then make a record of the experience. If you have worked on developing the habit of careful observation in Step One and then helped them digest the observations into meaningful thoughts in Step Two, they will be eager to express their knowledge in a way that is meaningful to them. Most of us are aiming to record our experiences in a nature journal so this is the time to work on meaningful entries. Remember that there are many ways a child can express himself after completing a nature journal entry so allow a variety of follow-up opportunities. You can find journal ideas on my page: [Nature Journal-Ideas and Tips](#).



# Advanced Nature Journals

## For the Parents: Additional Tips for Nature Study with Advanced Students

- ◆ Have a plan in mind for your outdoor time. Older children like to know the purpose of their study and this gets them engaged rather than feeling like it is an assignment.
- ◆ Equip them with a bit of prior knowledge using the *Handbook of Nature Study*, a good field guide, or the internet.
- ◆ Allow time for careful observation. Follow their lead and listen for additional questions to look up when you are inside.
- ◆ Bring your nature journal and camera with you for field notes and sketches. Let them record their data in a way that makes sense to them: sketches, photos and/or video, captions, bullet points, narrative, questions, thoughts.
- ◆ Collect samples if appropriate for collections or for pressing. Make notes for labels in your notebook for future reference (date, location, subject name, etc)
- ◆ Allow time for unstructured enjoyment of the outdoors in addition to your formal nature study. Combine a field excursion with another fun activity like rock climbing, swimming, and spending time exploring.
- ◆ Follow up with discussion, more observations, more research, and more documentation if necessary.
- ◆ Set your expectations in accordance with your goals for nature study.
- ◆ Making a video or scrapbook could be an additional idea for advanced follow-up.
- ◆ If your study is a supplement to your more formal science courses, decide ahead of time on specific documentation needed to support the work done through nature study.
- ◆ Your family can participate in a citizen science project as a product of your nature study. Check on specific documentation needed to submit to the project at the end of your research.

**For the Student:** Print this checklist, cut it out, and keep it with your nature journal. Use it as a way to remember items that can be included in your nature journal entries.

Nature Journal Reminders	Date/Time		Location	
	Weather		Sketch, photo, map	
	Rubbing or pressed flower/leaf		Detail—draw the whole object and then a small part of it	
	Record: colors, size, shape, scent, texture		Make comparison—size, texture, smell,	
	Experience—what happened		New details—go beyond what you already knew	
	Impressions: How does it make you feel?		Personalize—your “signature”	