

Natural History/Botany Booklist and Project list (7th - 12th grade) with additional elementary booklist

(NOTE**Books in GREEN are appropriate for elementary reading)

We focused on one Naturalist for study - Edith Holden. There are many others that could be chosen for this, but because our Botany course was a part of a larger course focusing on the Victorian period, this naturalist made sense and was very inspiring! Edwardians/Victorians had a special hobby of observing and identifying botanical information, so the breadth of knowledge during that period of the *average person* is really quite astounding.

BOOKLIST:

- ** The Country Diary of an Edwardian Lady by Edith Holden
- ** Edwardian Lady: The Life of Edith Holden compiled by Ina Taylor
- ** The Nature Notes of an Edwardian Lady by Edith Holden
- ** Learn to Draw Nature in the Style of the Edwardian Lady published by ArtTricks
- ** The Botany Coloring Book by Paul Young - this was a core book of the course. There is almost enough information in this book to build a very solid course in Botany! Don't let the idea that this is a coloring book fool you - it is DENSELY PACKED with information on each page. Each coloring page gets a 2-page spread - one detailing information, one for coloring with a key for differentiating certain aspects of the image (ex. parts of a flower, plant cell structure, etc.)
- ** Botany in a Day by Thomas Elpel (**NOTE** This author has written some books that have a definite New Age bent, however the book Botany in a Day is strictly science information. We found it a very helpful tool, but I wanted to mention the author's connections for consideration.)
- ** Winter Tree Finder by May Thielgaard Watts and Tom Watts (**NOTE** these "Finder" series small booklets would be an adequate substitute for Botany in a Day if you choose not to use it.)
- ** Winter Weed Finder by Dorcas Miller (see above note)
- ** Fern Finder by Anne and Barbara Hallowell (see above note)
- ** Flower Finder by May Thielgaard Watts (see above note)
- ** Keeping a Nature Journal by Clare Walker Leslie
- ** Collect and Paint from Nature and More to Collect and Paint from Nature both by John Hawkinson - very helpful and simple watercolor instruction for any age!! Both these books are out of print, but easy to find used.
- ** Amateur Naturalist by Lee and Gerald Durrell (**NOTE** This book is out of print, but worth the find! I like it because while it fosters a sound and common sense approach to ecological stewardship, it doesn't go overboard. It was originally published in 1982 by Dorling Kindersley, and used copies can be found fairly easily on Amazon and other used book vendors)
- ** Favorite Wildflowers coloring book published by Dover
- ** Wildflowers - Peterson Field Guide Coloring Books
- ** Botany Illustrated by Janice Glimn-Lacy and Peter Kaufman.
- ** Countryside Rambles by William Furneaux (out of print and difficult to find copies, but great for seasonal encouragement and awareness of natural observations in various settings - fences and hedgerows, woodlands, etc.)
- ** Nature Through the Seasons by Richard Adams (**NOTE** this book is out of print, but easier and very inexpensive to find used. Much easier to find than Countryside Rambles - it would be a good substitute. Great color illustrations and detail throughout.)
- ** A variety of field guides and reference...too many to list, but you'll need to have a good selection for identification and research. My favorites are Golden Guides. I prefer Peterson to Audubon guides (personal preference). And for general use and reference I like Readers Digest North American Wildlife. This is our one go-to book for identification as it covers everything - flora, fauna, animal life, insects, fungi.
- ** Handbook of Nature Study by Anna Botsford Comstock

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ADDITIONAL BOOKLIST FOR ELEMENTARY STUDENTS:

- ** Wildflowers of North America a Golden Field Guide
- ** Weeds a Golden Field Guide
- ** Backyard a *One Small Square* book by Donald Silver
- ** Woods a *One Small Square* book by Donald Silver
- ** Plant Families by Carol Lerner
- ** On the Forest Edge by Carol Lerner
- ** Flowers of a Woodland Spring by Carol Lerner
- ** Plant Secrets by Emily Goodman
- ** Plants in Winter by Joanna Cole
- ** How a Plant Grows by Bobbie Kalman
- ** Wildflowers, Blooms, and Blossoms by Diane Burns
- ** The Tree Book for Kids and their Grown-ups by Gina Ingoglia
- ** Roots, Shoots, Buckets & Boots by Sharon Lovejoy
- ** Hollyhock Days by Sharon Lovejoy
- ** Sunflower Houses by Sharon Lovejoy
- ** Sow and Grow by Tina Davis
- ** Seed Babies by Margaret Warner Morley
- ** Trees and Shrubs by Arabella Buckley
- ** Plant Life in Field and Garden by Arabella Buckley

PROJECTS: (Note - many projects and labs make use of the free labs offered at [Home Science Tools](#).)

- ** Wildflowers, Weeds, and Garden Flowers journal (notebooking pages [available here](#)). This study coordinates with the PLANTS section in Anna Botsford Comstock's, Handbook of Nature Study
- ** Complete a diary/journal of the natural year as it relates to our local setting. At least one monthly page required in the journal with botanical information detailed. Use a variety of media to illustrate Natural Year Journal, including watercolors.
- ** Dissect and identify flower, seed, nut, fungus. [Flower dissection helps here](#).
- ** [Spore Prints project](#) (use guide to identify safe and common mushroom for this...if unsure...use ones from the grocery store.)
- ** Specific project directed nature walks with seasonal emphasis...example - when reading Winter Tree Finder we walked in an unknown area and the assignment was to identify and illustrate 3 unknown trees based on the guidelines offered in Ms. Millers booklet.
- ** Observe plant dispersal and consider and explain various dispersal methods. Ex: maple tree in the front yard is easy...but be able to offer an explanation for why a sassafras tree is growing in the front garden when we don't have a sassafras tree near the house. Begin to observe unique plants growing in out of the way locations on nature walks...are they a seed or spore dispersal plant? how did they get there?
- ** Document observation of pollination with butterfly, bee, other insects.
- ** Pond water analysis with Pond test kit. Algae observation under the microscope. [Pond Study](#) **
- [Photosynthesis - Watch it Happen](#) - further study: [Photosynthesis: Sneak Peak inside a Leaf](#) & [Photosynthesis: Test for Starch](#)
- ** [Growing Mold](#) - use of microscope helpful.

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- ** [Leaf Chromatography](#) - should be done before the fall. Further information specifically for the fall - [How Leaves Change Color in the Fall](#)
- ** [Bioassay Test for toxicity of seeds](#)
- ** Don't forget to check into local service options that would further foster a botanical study. Check with your local botanical gardens or nature conservancy.

ADDITIONAL PROJECTS FOR ELEMENTARY STUDENTS: (Note - many projects and labs make use of the free labs offered at [Home Science Tools](#).)

- ** Begin a simple nature sketch book - one 10 minute nature walk weekly to the front gardens or backyard - sketch any nature treasure you find.
 - ** Try to identify flowers or leaves/trees using field identification guide.
 - ** Collect fall leaves and press and add to nature journal
 - ** Press flowers in the spring and add to nature journal
 - ** Choose one small bush or plant in the garden to watch and sketch how it changes seasonally.
- ** Mark out one small yard square and grow a simple garden
- ** Make a [worm bin](#) and observe composting in action
- ** Start a leaf collection using a flower press ([my favorite flower press here](#))
- ** Identify parts of a flower, parts of a tree, parts of a fruit, etc. I like [Montessori For Everyone's Botany cards](#).

The following are free resources - activities and archived science newsletters from Home Science Tools: (note - each of these activity sheets found online has an option at the very bottom to convert to a printable pdf in order to insert in a science binder...scroll to the bottom for this!)

- ** [Plant Identification](#)
- ** [The Fascinating World of Fungi](#)
- ** [How Flowers Grow](#)
- ** [Roots and Worms](#)
- ** [All About Leaves](#)
- ** [Flower Science Projects](#)
- ** [Fall Leaf Science Projects](#)
- ** [Gardening Science Projects](#)

NOTES:

- ** I broke the books and projects down into plans seasonally which made more sense when studying Botany.
- ** Use of p. 33 - 46 of [Science Scope](#) to reference coverage checkpoints of course for thoroughness.
- ** This list of books and resources, is as ever...incomplete! Please add to them...or subtract as needed!