

**NATURE STUDY BY  
MONTHS; PART  
I; FOR ELEMENTARY  
GRADES. [1898]**

Published @ 2017 Trieste Publishing Pty Ltd

ISBN 9780649655564

Nature Study by Months; Part I; For Elementary Grades. [1898] by Arthur C. Boyden

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**ARTHUR C. BOYDEN**

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# NATURE STUDY

BY MONTHS

PART I.

*FOR ELEMENTARY GRADES*

BY

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BRIDGEWATER, MASS., NORMAL SCHOOL

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BOSTON AND CHICAGO  
NEW ENGLAND PUBLISHING CO.

1898

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BE it mine to detect Thy hiding-place and unmask  
Thee. Be it mine to discover Thy beauty sleeping in  
the grass, Thy glory hidden in the dust.

MATHESON.

## TABLE OF CONTENTS.

CHAPTER	PAGE
<i>INTRODUCTION</i> . . . . .	v-viii
I. <i>SEPTEMBER.</i> — THE AUTUMN FLOWERS — INSECTS AND FLOWERS — HOW INSECTS LIVE . . . . .	1-12
II. <i>OCTOBER.</i> — AUTUMN CHANGES — THE LIFE OF THE LEAVES — DIFFERENCES IN LEAVES . . . . .	13-22
III. <i>NOVEMBER.</i> — THE HARVEST MONTH — HOW SEEDS ARE PROTECTED AND SCATTERED — GROUPING OF FRUITS . . . . .	23-31
IV. <i>DECEMBER.</i> — PREPARATION FOR WINTER — EVER- GREENS IN WINTER . . . . .	32-41
V. <i>JANUARY AND FEBRUARY.</i> — ANIMALS IN WINTER — LESSONS ON THE AIR — FORMS OF WATER — COMMON MINERALS . . . . .	42-60
VI. <i>MARCH.</i> — THE SPRING AWAKENING — BUDS — THE GROWTH OF TWIGS — HOW SOIL IS FORMED . . . . .	61-74
VII. <i>APRIL.</i> — HOW SEEDS GROW — HOW YOUNG PLANTS GROW — DIFFERENCES IN SEEDS — THE CONDI- TIONS OF PLANT GROWTH . . . . .	75-86
VIII. <i>MAY AND JUNE.</i> — SPRING LIFE — ANIMAL LIFE — FLOWERS IN THE SCHOOLROOM — PLANT LIFE — BIRD LIFE — THE FISH — THE TREES IN BLOOM,	87-104
<i>REFERENCES</i> . . . . .	105-106

## INTRODUCTION.

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### *SUGGESTIONS FOR NATURE STUDY.*

**Love of Nature.** The study should include the child's environment, — the living animals and plants, the earth substances, and the forces at work upon them. The child's observation should be the starting-point. The teacher serves as the guide, suggesting material, stimulating and directing the observation and thought. This work should, above all else, lead into a strong love of Nature, an appreciation of the beauty, harmony, adaptation, and plan in the world about us; a sympathy for all living things, which manifests itself in thoughtful care and kind treatment.

**Training.** The aim is to cultivate in the child what may be termed the elementary equivalent of the genuine scientific spirit, so that out of his native fondness for things about him shall come an enthusiastic, truth-seeking, reverent attitude toward Nature, with boldness to question her, patience to study her, and readiness to be taught by her. Plan in all possible ways for out-of-door observations, as this is the true field of Nature Study.

**Expression.** Cultivate the various forms of expression, such as drawing, coloring, oral and written language, and in cases that readily admit of it, construction. The work should be closely related to language, spelling, reading, and particularly to literature. It should appeal to the imagina-



tion, and the artist and poet should be called upon to help the child interpret the beautiful. Some of the best selections should be committed to memory. Many applications of number, form, and color will suggest themselves.

As the child understands his own environment he is prepared to appreciate geography as the study of the home of man. The thoughts of the life throbbing through the plant and animal, and of the forces at work about us, all in perfect harmony, and for definite purposes, are suggestions of infinite law. Such thoughts are among the loftiest that can possess the human soul.

#### *HOW TO PLAN THE NATURE LESSONS.*

Select typical phenomena from the daily environment. A short excursion near the school grounds, or even to the window, is the best form of introduction. Then arrange an exercise along the line of some great nature truth of the season.

Careful work can be begun in a simple way in the kindergarten and primary grades, having each pupil at work observing and thinking for himself. Keep within the range of the child's interest and comprehension. Do not go much into details, but remember that he sees things in a large, crude way; intensive study belongs to maturer years. In the grammar grades the work takes on more of the laboratory plan.

**Introductory questions** find what the child already knows, or can discover without specific directions. These should arouse the interest, and stimulate to further inquiry, especially out-of-doors. A literary selection or myth often arouses interest at the beginning of an exercise.

**Observation** of specimens by the pupils should be spontaneous and natural, with as few directions as are consistent with

good training. Individual power to observe always has the element of originality prominent.

The teacher directs pupils in correcting their observations or expressions, drills on the new words and on improved forms of expression, and leads them in thinking of the adaptations and uses. Supplementary reading should be kept distinct from the observation lesson. Literary selections usually furnish the most helpful written language practice.

**Drawing**, coloring, or modelling (where possible) of the objects observed, in whole or in parts, by directions. These may be on drawing-paper, and particular emphasis should be given to the pictorial and artistic. Color work should be made prominent.

**Written description** ("story" in lower grades) of the subject should be from an outline according to the language work of the grade. Drawings, descriptions, and literary selections may be bound as a booklet. General voluntary work should be encouraged, e.g., collecting, mounting, labelling, out-of-door observation, silent reading by pupils.

*OUTLINE OF NATURE LESSONS.*

- September.** . . THE AUTUMN FLOWERS.  
INSECTS AND FLOWERS.  
HOW INSECTS LIVE.
- October.** . . . . AUTUMN CHANGES.  
THE LIFE OF THE LEAVES.
- November.** . . . THE HARVEST MONTH.  
PREPARATION FOR WINTER.
- December.** . . . THE EVERGREENS IN WINTER.
- January and** ANIMALS IN WINTER.
- February.** . . LESSONS ON THE AIR AND WATER FORMS.  
COMMON MINERALS AND ROCKS.

- March . . . . .** THE SPRING AWAKENING.  
HOW THE BUDS GROW.
- April . . . . .** HOW THE SOIL IS PREPARED.  
HOW THE SEEDS SPROUT.
- May and June.** SPRING LIFE.  
THE PIPING FROGS.  
THE RETURNING BIRDS.  
INSECT LARVÆ.  
TREES IN BLOOM.  
COMMON WILD FLOWERS.