

The Teaching of Nature Study in Rural Schools

By Miss Emma A. Smith

OUR first thought is what is Nature Study and what benefit is it to the child? Nature Study consists of simple, truthful, observations of nature. This being so we must lead children to see things exactly as they are thus leading them to discern the truth.

The children gain much useful knowledge as they learn of Nature's ways and forces.

Nature Study should give the child a life-long love of nature and companionship with nature. It should fill his mind with beautiful thoughts and wholesome interests and thus separate him from much evil which may lie in his way.

From my own experience I have chosen the last hour of the day for the regular lesson. It matters not how weary and dull the children may be feeling they become active, eager and excited over the lesson even when taught in the school-room. As they gather around the specimens, experimenting, observing, reasoning they become so absorbed and happy that all weariness vanishes. Going from the school-room in this spirit makes school a better place. When giving a lesson in the school-room if possible, put the child on the road of making an interesting discovery for himself before the next lesson day. Rarely will you have to wait that long. His self-acquired knowledge will be the most important topic of conversation the first time he meets you.

Out-of-doors seems the best school-room for the Nature Lesson. The children will love it and will accomplish an astonishing amount of work on the promise of a trip to field, pond, stream, woods—anywhere out under the blue sky.

Although there is an abundance of material on hand at all seasons of the year the spring seems to send out the strongest call to the student of nature. During a part of the year we keep our observations in connection with our Weather Reports, but from March 21st to the end of June we keep separate daily records of our Nature Study Observations on which each child records all he observes of nature such as: the melting of the snow, the directions of winds and rains, the starting of the sap, the flow of ice in the river, the passing of the wild geese, the first croaking of the frogs, the return of the birds, the budding of the flowers, the first ploughing and the sowing of each kind of crop—anything—everything. The child who hands in

the best record gets a prize when the time of prizes come but no child is compelled to pass in his record to be judged for a prize in the contest. I keep in touch with all these records and know just what each child is doing, thus keeping up both his and my own interest.

Often in the spring-time we keep special bird and flower calendars, carefully drawn and decorated, ruled under such headings as:—Name of Bird, or Plant, Date when first seen, Description, and Name of Child Reporting it. Each child is proud to report his discovery. He will search fields and woods for the earliest flowers and never fails to report and record his discovery. These calendars are the work of the whole school.

When we do not recognize the specimens of wild flowers, weeds, bugs, beetles, grubs, caterpillars, etc. brought into our school-room, and cannot learn their names from our colored charts or books, the children forward their specimens to The Department of Botany, Entomology, Agriculture or Horticulture, at Ottawa and always receive the desired information.

One season our special subject for study was Butterflies. Making a collection for our school served to give the children some knowledge of most of our butterflies. When autumn came we found the beautiful, black, green and golden caterpillar, of the black swallow-tail butterflies. We kept them for study, putting them with leaves on which they were feeding into cans with perforated tops. The children wondered much when they found the first chrysalis swinging from the cover. You may be sure they did not stop with one, and they received their reward in the spring when the butterflies came out. They also found a smaller, daintier chrysalis, suspended from a window sash, which developed into a cabbage butterfly.

One child brought in the large, horny caterpillar of a cecropia moth. It was a great wonder to see him weaving his cocoon, and often during the winter children found and brought in other cocoons like it. I shall never forget the cry of amazement that greeted the first Cecropia Moth when she was discovered, with her immense soft, furry body and crumpled wings just after she emerged from her cocoon. That was the time for a Nature Study Lesson. How those children watched as she hung to a twig and unfolded her wet and wrinkled wings until in about an hour's time we had a beautiful moth measuring $6\frac{1}{4}$ inches across the wings. We mounted and kept a pair of moths, their cocoons and eggs. Among many others we got the cocoons and hatched out several Polyphemus Moths. Once we thought we had a Luna Caterpillar but an accident befel the cocoon. We got the much battered remains of a Luna found dead in the woods. In all