Children's Work at the Brooklyn Botanic Garden

Most botanic gardens in the world offer nothing in specially planned work for children and teachers. It has been the aim of the Brooklyn Botanic Garden to make a definite contribution to the children of its Borough. The work is confined strictly to plant study. Other phases of nature study are only incidental as they appear in our work.

The work may be classified in this way. First: classes for school children. They come with teachers in school time. Second: classes for children on Saturday mornings and vacation periods, and also after school. Third: classes for teachers.

Group I

Work for visiting classes from schools. We give a series of lectures, lessons and field trips on nature study, geography and gardening for school children coming with their teachers in school time. The topics are planned to correlate with the city courses of study in nature study and geography. For instance, if a class is studying South America, it would choose a talk on coffee or rubber or both. Sometimes lantern slides are used, sometimes motion picture reels. The class is presented with syllabi of facts, which have been worked out for the use of the individual child. Then the class will go to the greenhouse to see the coffee or rubber tree growing.

Many classes come for trips about the grounds. In such cases an itinerary is planned. A mimeographed sheet is given to each child so that he may follow the course around the grounds and know exactly what to look for. The child takes it back to the school so that he may review his trip and make it a part of his class work, or at least make it a part of his own distinct memories.

Some schools ask to have classes come regularly once a week for a series of weeks for a definite set of lessons. Requests come for work in the school auditoriums along just the same line as that carried on at the Brooklyn Botanic Garden. The stress is placed on urging classes to come here because of the natural facilities of grounds and greenhouses, and because we desire the children to become acquainted with this civic plant of theirs.

Group II

In the second group the Brooklyn Botanic Garden conducts a little school of education in nature study, greenhouse work and gardening. From 185 to 225 children attend every Saturday of the year with the exception of Saturdays in January. In the fall the work is based upon fall nature study, the raising of bulbs, cuttings and Christmas plants, working in the greenhouses. Sometimes it includes basketry. This work ends with Christmas season. During the month of January the older boys and girls come back for some special piece of work, a privilege open only to the older ones.

In the spring the work is based entirely upon the outdoor garden. The children raise seedlings, get acquainted with the seeds, the soil and various other steps in gardening work before they go out into the outdoor gardens. The outdoor garden offers of course first an opportunity for educational work, and is not merely a place to raise vegetables and flowers. The children learn not only nature's ways but lessons in self-control, straight thinking, and proper appreciation of what the beauty in life means.

These children who come in this second group come because they wish to come and are chosen on these grounds. They pay some nominal fee in order that the work may seem entirely theirs. They have their own organization called the Boys' and Girls' Club of the Brooklyn Botanic Garden, and their own paper, which they edit and publish, called the "Agricola." The different stages of progress by which they win their honors and medals and pins are conducted so that the unpleasant features of competition are entirely taken away.

Group III

The third group comprises classes for teachers in botany, nature study, greenhouse work, pedagogy of botany, the theory and practice of children's gardens. These classes are held after school, and are arranged to cover a period of thirty weeks so that college credit may be given, if desired. They are also under the Brooklyn Teachers' Association.

There is a little verse from Wadsworth over the children's house which gives the motto of our work with children and teachers, and reads:

"He is happiest who hath power
To gather wisdom from a flower."

Not to gather flowers, but to gather wisdom from a flower.

ELLEN EDDY SHAW, *Curator, Elementary Instruction, Brooklyn Botanic Garden.*

Science News-Letter, August 13, 1927

The material on this page is furnished by the Coordinating Council on Nature Activities.

Star Games

There is more than one way of skinning a cat, and more than one way of interesting children in Nature Lore. These Star Games go further in that direction than hours of lecturing.

ACTIVE STARS: The players stand in a circle with leader. Leader displays diagram of constellation (white stars on black paper is best) and says, "Simon says this is Cassiopeia." If this is right, they jump and clap hands above their heads; if wrong, they stand silent. If "Simon says" is omitted by the leader and the balance of the statement is correct, they try to get card with constellation. If "Simon says" is not omitted, but statement is incorrect, leaders and seconds must race around circle. This may be simplified at first.

STAR PICTURES: Each group is provided with fifteen paper stars which are placed at the feet of Number One who has balance of group at his or her back. Leader stands in front and displays diagram of constellation to Number Ones so that no one else may see it. Number Ones go back to patrol and place paper stars to form constellation shown by leader. Number Twos race to leader, name constellation and return to correct any errors in the form of the constellation. Leader may decide which constellation is best. Number Threes race for another constellation and Number Fours name and correct it and so on.

(Later after the constellations in the sky are known—each one can form the constellation called out by the leader.)

VARIATION: Players lined in relay information and leader calls out name of constellation—same number as stars in constellation hold hands and race to front of room and kneel forming constellation. First placed and correct wins.

STAR GRAB: Have cards with constellation on them and place these in their right positions on the floor or ground. The leader calls out the name of a constellation or star and the first player (relay—Number Ones,

(*Just turn the page*)

Star Games

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etc.) to seize the correct one secures a point for their patrol.

ALTAIR and VEGA MEETING: Tell story of Chinese legend concerning Altair and Vega, the river of the Milky Way and line players up in two files facing one another and about twenty feet apart. Let players select one from each side to be Altair and Vega. Vega starts from one side and Altair starts from the other. Leader begins by asking Vega's side a question regarding the stars. Number One answers and if correct, Vega takes one step toward Altair. Altair's side is next and leader asks question there. If one side should miss, other side may answer question and let their star take two steps forward. Five questions should be allowed each side (that is, five steps or ten feet), and Vega and Altair should meet—if they do not—game can be closed and "Rain of Tears" continues.

Questions like: 1. Name planets visible at night in this season. 2. Name five first magnitude stars visible this month at night. 3. What three constellations are always visible? etc.

STAR STUNTS: Players can be divided into several groups and given "Sealed Orders" such as:

1. Act out story of Casseiopeia or make up some story that will be original and entertaining.

2. Make up original words to some familiar tune. This song should be woven around the story of the Big Dipper, or the Great Bear.

Each group will draw for turn on program and is given five or ten minutes to prepare stunt.

—MARIE AFTNITH,
Girl Scouts, Inc.

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Nature Coordination

Realizing the need for a national program that would coordinate the nature activities of national groups working with young people, the American Museum of Natural History invited these volunteer organizations to form a council to be known as the Coordinating Council on Nature Activities for the purpose of teaching the growing generation, through nature activities, the value of all wild life and natural resources and their conservation.

The various organizations represented are as follows:

American Museum of Natural History, American Natural Study Society, Boy Scouts of America, Camp Directors Association, Camp Fire Girls, Inc., Girl Scouts, Inc., Pioneer Youth of America, Playground and Recreation Association, Woodcraft League of America.

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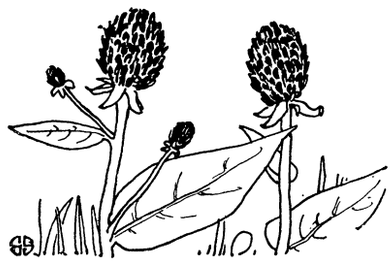
BOTANY

NATURE RAMBLINGS

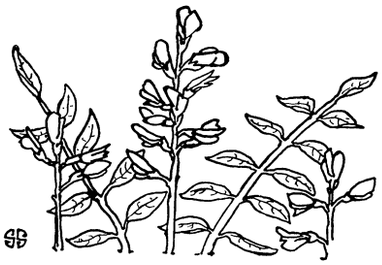
By FRANK THONE



Two Curious Plants

Everyone who spends his vacation in Yellowstone National Park or anywhere in that general region, will see great quantities of the rayless coneflower. This very curious plant looks more or less like one of the numerous species of wild sunflower or related flowers that can be found anywhere. It has rather coarse, rough stems, from three to five feet high. Its leaves also are rough, broad at the base and tapering to a point. It rather likes moist places, which accounts for its frequent presence in mass in the roadside ditches.

The curious feature about it is the flower, or rather the flower-head, for the plant is a composite, crowding scores of tiny flowers into an apparent single bloom. Only this flower, instead of having a gay collar of petal-like "rays" about it, just sticks up like a little black pine-cone. The main stem and larger branches bear large cones, and the lesser branches bear little ones. One would think that this plant, having so little to attract insects to their task of carrying pollen, might have a hard time of it; but quite the contrary is true, for it is one of the commonest species in the region. Perhaps it depends on underground runners or rootstocks for propagation, or forms its seeds, as many of its relatives do, without pollenation, or it may even be successful in attracting insects without a colored flag. Nobody has given it much study, and the question is still an open one for some enterprising botanist to tackle.



Another curious flower that grows in the same region, as well as in many other parts of America, takes us back to memories of the quaint old drug shops our parents and grandparents knew. Modern drug stores, where you can buy anything from an imitation ivory toilet set to a popular novel, have their advantages; but a generation whose hair is beginning to grow thin on top (in spite of tonics recommended by glib salespeople) remember with regret the "lickrish root" of their childhood, handed out as *lagniappe* by the old-fashioned druggist with every dime purchase. Nothing on the modern candy counter tempts the appetite as did those pungently sweet bits of soft, barky wood, that supplied just the right resistance for vigorous and satisfactory chewing.

How many of us knew then, or now, for that matter, that licorice is a plant related to beans and peas? Yet so it is. The licorice of commerce is one of a dozen species scattered around the northern hemisphere, and one of them running down into South America. In many places in this country, especially in the northern Rockies, you will see quantities of wild licorice growing by the roadside and along the bottoms of moderately moist gulches.

It is a densely bushy plant, with lush, dark green foilage, reaching a height of two or three feet. The leaves are somewhat like those of a locust tree, but bigger and coarser. The creamy flowers are shaped individually like narrow pea-flowers, and are densely crowded together in spires that stand up above the mass of leaves.

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