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How to Collect and Press Plants

By GEORGE F. LEDINGHAM, Regina

EDITOR'S NOTE: Some members have asked for a series of short informative articles explaining how to begin the study of plants, birds, insects, etc. In response to one of these requests I have prepared a few notes on pressing plants. In this issue, we also have some notes from a series of three lectures given to the Prince Albert Natural History Society by A. O. Aschim on "Collecting Moths and Butterflies As a Hobby," and a short article on "The Amateur Astronomer" by John Hodges of the Regina Astronomical Society. In the September *Blue Jay*, we hope to have a report of an interview with Maurice Street telling how to become a bird watcher.

Collecting plants means different things to different people. Some people collect plants and grow them in their garden. When this is done on a large scale, we have an arboretum. Other people collect plants for the purpose of pressing them and making a collection of dried specimens. Such a collection arranged in plant families and available for reference or other scientific study is known as a herbarium.

Why don't you make a collection of the plants growing in your district? You will find plant collecting an interesting hobby. You will find, too, that your interest in plants grows as you learn more about them. Dried plants, if properly cared for, will keep indefinitely and if they are correctly identified you will have something really valuable. Many people will want to see your collection, for this is the easiest way for them to learn the correct names of the plants.

The first step is the study of the specimen in the field. Here you must first look around to be sure that there are more than just one plant of this kind growing in the area. Now you can take out your notebook and assign a number to the plant. Describe the plant if you do not know its name and mention any variations that you notice in the plants. It is

well to make notes on color for this sometimes changes in drying. Now record the date and the location. It is important, too, to record the other plants which are growing in this spot for plants do tend to grow in recognized associations.

The second step is the collecting. Except in the case of trees or shrubs where a part of the branch bearing fruit or flowers is sufficient, the entire plant, including roots, should be taken. If the ground is soft and the plant is an annual, pulling the plant may give sufficient roots. If the plant is a perennial, especially if it spreads by underground rootstocks, or if the ground is hard as it usually is on our open grassy prairies, then a trowel or other digging tool must be used to prevent breaking of the plant.

The third step is the pressing. One does not need elaborate apparatus for this job. Some use big old books with soft absorbent paper, and if you are only collecting a few plants this will do very well for you. Most collectors use old newspapers; take a standard newspaper sheet in half and fold it once to give a size of not more than 12 by 18 inches. Sheets of newspaper, each containing one specimen, may be separated by blotting paper or corrugated cardboard. This pile of papers and driers must be weighted down by some flat weight.

by a stone about 15 pounds on top of a board. After 12 hours in the press the plants should be moved to another dry place in the book or press. Rapid drying of the plants is important. The blotters should be separated and dried thoroughly so that they can be used again. Length of time in the press and the number of changes required will depend on the kind of plant and must be learned by experience. In humid countries artificial heat is necessary to speed the drying process.

An important step in preparing good specimens is the arranging of the material as it is placed in the press or while it is still pliant. Leaves should be placed so that the upper surface of some will show. If the plant is very thick and leafy, judicious trimming will have to be done so that there will not be too much overlapping of parts; the lower part of the leaf stalk or branch should be left to show that some parts have been removed. If the plant is more than 16 inches tall it may be bent in a V-shaped or N-shaped manner.

Plant collectors usually take at least two of each plant they collect. This is because, in addition to making the record and placing a specimen in their herbarium, they will want to send one specimen to an expert to have the identification verified or they will want to give the specimen to a large herbarium where it can be seen and used by many botanists.

Perhaps you hesitate to make a collection of the plants of your area because you think that you could not identify the plants correctly. This is no excuse because your plants will be identified free of charge by any botanist with a herbarium. Simply put your collection number and the data from your field notes with each specimen, place the plants, each in its own newspaper folder, between cardboard, tie them tightly together and mail them to the nearest herbarium. You should have a duplicate of each specimen, for the herbarium will keep the plants sent in as payment for identifying them for you. You may send plants to the herbaria at the University of Saskatchewan in Saskatoon or to Regina College in Regina.

Plants are usually mounted on good white paper (11½ by 16½ in.).

Sometimes the plants are glued or pasted to the mounting paper but in some herbaria the plants are simply held to the paper by thin strips of gummed linen. Each herbarium sheet must have a label which should be about 4½ by 2¾ inches. This label will bear the collection number and the name (both scientific and common). It will give the location and habitat of the collection and may give other details about the environment and tell what other plants were growing in the area. The label will also bear the name of the collector and tell who identified the specimen. You may write or type your own labels, or have them printed for you.

All this may sound like a lot of work but the time spent is worthwhile because as you work with plants you learn more about them. You will learn more than just the names of the plants. You will learn that each kind has a certain range of variations and that each has soil and climate preferences. You will not only be making a contribution to our knowledge of plants but you will be developing a most rewarding hobby.

To learn more about the plants you collect send to Information Service, Department of Agriculture, Ottawa, for your copy of Publication No. 983, "Wild Plants of the Canadian Prairies," by A. C. Budd. Price \$1.50.

INVITATION TO VISIT DRYDEN, ONTARIO

Mrs. Laura A. Howe, an enthusiastic member of our society from Dryden, Ontario, writes to say that since Dryden is on the Trans-Canada Highway, with lake and marsh, flora and fauna close at hand, she would be happy to take any of our members on side-journeys anytime from May to freeze-up. Her phone number is 170, and we hope that some of our members will have the opportunity to take advantage of this attractive invitation.

NOTE: The Museum would like to have a complete set of the original publication: **Spade and Screen**. Any person with extra copies is asked to correspond.