has been made in the abdominal wall to allow penetration of the fluid. The best solutions for the purpose are commercial formalin (diluted two to one) and alcohol (about 80\%).

In closing, I would like to express the desire to hear from nany more readers of the "Blue Jay", and wish you all good hunting for information about the wild life of our Province.
$\frac{\text { MUSKRATS }}{\text { by }}$
W.A. Brownlee
Provincial Dept. of Natural Resources.

Back about 1909 nuskrats were very plentiful and everywhere they were trapped during the entire fall and winter months. There were no trappers licenses in those days and muskrat pelts had to be good to bring . $15 \phi$ each. Gradually muskrats began to disappear until finally closed seasons were imposod. Fall trapping was prohibited, shooting and spearing was out. Finally a closed season had to be declared for the entire year. Then as musicrats became plentiful the season was opened in the springtime and as "rats" were worth around $.75 \notin$ to $\$ 1,00$ they were trapped out to the point of extinction in a short time.

It is interesting to note that "Ducks Unlinited" constructed a ditch during the summer of 1942 from Willowbrook Creek to divert the water to the Rowsay Lakes and York Lake areas. During the spring of 1943 there was a fair "run-off" and a good supply was maintained in both Rousay and York Lake. During November 1943 a count was made of the muskrat houses on Fovsay Lakes, by members of the Yorkton Natural History Society, and numbered 194 houses. There was no open season for the taking of muskrats in the fall, but in the spring of 1944 a general open season was declared and the muskrats were pretty well thinned out. However a few poachers were apprehended on the area and this had sone good results. The muskrat houses were again counted in the fall of 1944 by members of the Yorkton Natural History Society and 576 houses was the result. There was no general open season on muskrats during the spring of 1945, but no doubt the "noonlight" method of trapping, along with the illegal fur dealer carried on some business from the area. However, the residents of the area began to see that an effort was being made to build up the muskrat population and they rendered great assistance in reporting illegal trapping.

Muskrats flourished during the summer of 1945 and the count made in December of that year showed there were 1200 houses on the area.

Early in Fobruary 1946 the Game Branch of the Provincial Departwient of Natural Resources proposed to introduce the quota systeri of trapping muskrats to the Southern part of the province. This system has been in effect for sone time in the marshes of Manitoba, and showing results. Under this system a trapper would be allotted a certain piece of marsh and would trap a quota of muskrats from that area. No one else would trap on the area allotted to him, and he in turn would trap only on his own. As nearly as possible not more than three nuskrats per house would be taken, as it is estimated that the average is five muskrats per house, and at least 40 per cent must be left to insure sufficient breeding stock. The pelts were to be turned over to the Game Branch and sold through the Saskatchewan Fur Marketing service. Twenty per cent of the proceeds were to be taken by the departinent for development work and the balance paid to the trapper.

March 20, 1946, when the season opened, there were some 33 trappers on the Rousay Lakes area. Each man trapped his quota of 80 rats, and actually some 2614 pelts were taken. The trapper averaged $\$ 2.62$ per pelt for his share - pretty fair money, I would say, for 10 days work.

During the fall of 1946 an attompt was made to have the trappers organize their own co-operative to trap this area, but so far only the seeds of such a venture have been sown.

A count of houses was made again during Deceraber and this spring (1947) there are 1660 muskrat houses, where there were only 194 in 1943. The department of Natural Resources has had to supply patrol men for the area, and will again have to supply general supervision of the trapping this coming season. The Departrient will also be entitled to 20 per cent of the net proceeds from these narshes. However it
is hoped that possibly by another season, the trappers will organize under Co-operative lines and assume much of the management of these marshes thenselves, as they are beginning to realize the great possibilities of muskrat production in this area.

## SASKATCHEWAI FLOWERS <br> by <br> I.T. Carmichael

Those who are particularly interested in Botany, if they have not already done so, should obtain from our University a copy of "list of Plants of Saskatchewan", compiled by the late Dr. W.P. Fraser and Dr. R.C. Russell.

We are fortunate in this province to have such a record. It contains the names habitats and locations of over fourteen hundred wild plants. Professor Fraser worked untiringly on the collection and study of our native plants, from his arrival in Saskatchewan in 1917 until his death, and during that time built up at the University a comparatively large herbariun of excellent matenial. His work has been carried on with equal enthusiasm and marked succoss by Dr. Russell.

To the amateur - and the anateur is not necossarily a green novice or beginner but according to the Oxford English Dictionary is "One who loves, is fond of, or has a taste for anything; one who cultivates anythine for a pastime" - to the amateur then, the great thrill comes when he finds a plant not mentioned in the Check List.

It stands to reason that within the borders of this province with its countless and varied habitats, extending fron the driest prairie to the muskegs of the Arctic, there are still plants whose precence here have not been noted by the authorities. We, as amateurs, have the opportunity of doing our part by assisting the University in making this list complete.

The best way to do this is for all interestod to send rare or unfamiliar specimens to Dr. Russell for indentification. The "Blue Jay" also, is interested in assisting with this work and would like duplicate or triplicate specimens of any uncommon or rare species. Before submitting specimers for identification, press and dry them thoroughly. Be sure they are in full bloon. If possible, press and dry them between alternate layers of newspaper and corregated cardboard. Press under a fifty pound weight at least. Exanine after one day; change paper and straighten out and re-arrange leaves, flowers etc. The quicker the specinen can be dried, the better it will retain its color. If the flower is a rare spocimen, such as Ladies' Slipper, Mealy Primrose or Shooting Star, do not pick any more specimens than necessary and never thin out noticeably an entire group or patch. Conservation of such flowers is very essential.

For each specimen, record the habitat and locality in which it grew and the date of collection. Number each specimen and keep a duplicate, similarly nurnbered. Mail between two thick sheets of cardboard and send to the Provincial Museum, Regina.

Be on the look-out for specimens marked "(Sask.)" and "Range" in the check list. "(Sask)" means "Recorded from Saskatchewan in certain nanuals but not collected": "Range" means "Not reported from Saskatchewan in the manuals, but from the distribution given, likely to occur".

In my herbariun I have the following species, not now rocorded in the Saskatchewan check list. These specimens were deterninod by lir. E.W. Hart, of the Division of Botany, at Ottawa. On closor examination of actual specimens by a western authority, such as Dr. Russell it micht be found that some of these specimens have been classified as closely related species.

Great Bur-reed Poplar Good King Herry Anemone Hoary Alyssum Treacle Nustard Sweedish Turnip

Sparganium androcladum
Populus nigra L. var. Italica Dur.
Chenopodiua Bonus-Hemicus L.
Anemone multifida
Berteroa sincana
Erysimum parviflorm
Brassica canpestris

