

Since all nests were roughly classified according to size, and since the types of birds nesting is known, a rough estimate of the different kinds of birds could be determined. The possible order might be: Robin, House Sparrow, Cedar Waxwing, Chipping Sparrow, Yellow Warbler, Purple Finch.

It was felt that this survey could become a general thing and perhaps could be used to estimate bird numbers in other places.

## Jack—The Canada Jay

Mrs. W. D. Woolrich, Clair, Sask.



After reading Mr. Gilroy's article in the "Western Producer" on the Canada Jay, we thought perhaps the readers of the "Blue Jay" would like to hear of one who visited us last winter.

We first noticed it stealing the Chickadees' suet. After a few days it would come quite close when we called, "Jack!" It became so tame that before spring we were able to take the snap, shown on this page, of my son with Jack on his arm. It was after the bread he was holding.

Other visitors, Waxwings and Grosbeaks, enjoy the crabapples. A few days ago I noticed a woodpecker had filled quite a big crack in a telephone pole with suet.

I have a very warm corner for our winter birds—they help brighten our winter days and seem more like faithful friends than our summer visitors.

## Some Butterfly Observations

Ronald Hooper, Somme, Sask.

There is something about butterflies that is unsurpassed in any other organism. Something that is found in the flitting of fritillaries, the sallying of meadow-browns, and the dashing of skippers as they bolt forth at your feet and make a swift, low flight, drop suddenly to the ground and remain motionless. Has God created another creature with the charm of a swallow-tail, or the beauty of a tiny blue?

Some butterflies are easily caught, but there is always some gayly coloured speeder who will test your skill with the net. What adds to the interest of butterfly collecting is the chance of catching wind-blown strays. These may be carried with the wind several hundred miles from where they were hatched. It often makes one wish he had a band on them so he could see how far they had travelled.

Like birds, butterflies have their times and their seasons of appearance, although their appearance depends more directly on the weather than it does with birds. Have we winter butterflies? Yes, we have, for every species must pass our bleak northern winters in some form or other, either as eggs or pupae, or in hibernation as larvae (caterpillars) or adults. The tortoise shells and commas hibernate in the adult form. We have found the Mourning Cloak hibernating in grain stocks, the American Tortoise-shell in lumber piles, and the Compton Tortoise in log buildings.

Like other things butterflies have their cycles. Last year the Cosmopolite was by far the commonest species. This year we didn't see one. The condition of the Red Admiral was similar. These species migrate to a certain extent, so perhaps that has something to do with it.

It is interesting to try to raise butterflies from caterpillars. What a big appetite they have! How fast it makes them grow! But make sure it is a butterfly caterpillar you are raising. We once ignorantly fostered a family of sawflies.

One day this summer I found a pupa-case on the under-side of a

Curled Dock (*Rumex crispus*) leaf. The outside was covered with a sort of a netting. Through the netting you could see something orange that occasionally made a slight movement. I thought for sure it was some kind of copper, but to my surprise it turned out to be a Curculionid weevil. However, this is not so disappointing as it seems, for it is part of our small, but fastly growing collection of beetles. It is surprises like this that help make things interesting for the student of nature.

## BUTTERFLIES

If you are now collecting butterflies in Saskatchewan, or are interested in starting this fascinating hobby, will you please let me know, as I am trying to gather as much information as possible on their distribution in this province. This field is somewhat understudied and a thorough research requires the co-operation of as many naturalists as possible.

—Ronald Hooper, Somme

# Umbrella-worts in Saskatchewan

ARCHIE BUDD, Swift Current

The Umbrella-worts have rather peculiar flowers and are a little puzzling when first encountered. Below the flowers is a membranous, five sided involucral bract which generally flattens out when the flowers mature. On this bract are from one to five flowers, with no petals but with coloured united sepals, generally pinkish in colour. The number of stamens varies from three to five in each flower, and they protrude conspicuously when the flowers first open. The base of the calyx is constricted or drawn in just above the single seeded ovary. The leaves vary somewhat but are generally lanceolate or linear-lanceolate, fairly thick and are borne oppositely on the stem, with either a very short stalk or none at all.

The commonest species in Saskatchewan is the Hairy Umbrella-wort, (*Oxybaphus hirsutus*) which bears glandular hairs and is found on light sandy soils. There is a form of this species which is almost hairless and this is about as plentiful as the hairy form.

Another species is the Heart-leaved Umbrella-wort, (*Oxybaphus nyctagineus*) a native of eastern Manitoba and the States adjacent to the south. This has larger, ovate to cordate leaves, mostly with definite stalks and reddish coloured inflorescence. This plant seems to be spreading westward along the railway tracks and in some places near Swift Current has taken full possession of the cinder fill alongside the tracks and is competing for domin-



ance with the Smooth catchfly.

The garden plant, Four-o'clock or Marvel of Peru is one of the Umbrella-worts as is the plant from which jalap, the purgative, is obtained. The Umbrella-worts have been placed in several genera, *Allionia*, *Oxybaphus*, and more recently, have been put into *Mirabilis*. Probably the common name has reference to the somewhat umbrella shaped involucre. Dr. Stevens, the well known botanist of North Dakota, fittingly calls it Wild Four-o'clock.