

The Lady's-slipper



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The Lady's -Slipper

The Lady's -slipper is the official newsletter of the Macnamara Field Naturalists' Club, P.O. Box 94, Arnprior, Ont, K7S 3H2.

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President's Address.

Another winter with its northern flair has come and gone. Twittering redpolls, silent snowy owls and snow-white snowshoe hares and ermine are now all fond memories to be cherished until next winter's reappearance.

With spring's return, eyes turn toward the tall spires of the Catholic church, eagerly seeking the return of the peregrines. It is now all of four years since the historic appearance of a peregrine falcon in late April of 1983. It was an unforgettable thrill. I was returning to my in-laws' house adjacent to the church on a cool and drizzly day. Suddenly a swift form with broad pointed wings and longish tail dashed by the spire in hot pursuit of a panicking starling. Moments later the noble hunter returned with its prize clutched in its talons. Perching on the spire the bird feasted, obligingly remaining for a number of admiring observers.

Little did we realize that this bird would remain throughout the season, later showing up with a mate and family. This marked the first nesting in Ontario of these magnificent birds since 1963. This was doubly historic as it also represented the first Ontario mating of released peregrines from the re-introduction programme.

The peregrine falcon once ruled the skies over much of central Ontario. Never common, the falcons often chose remote cliff ledges for nesting. Pesticides, especially DDT, in heavy use after the Second World War, built up in the falcons, resulting in egg shell thinning and behavioural changes. The falcons decreased, and no new ones were raised to replenish the population. Today, and for the last decade, captive birds produce young for release through the province.

In 1985 I had the unique privilege of visiting over 60 of the former nesting sites in search of new activity. This three month expedition led me from the Niagara escarpment through the Bruce Peninsula, across northern Lake Superior and up to the Hudson Bay tundra. Many incredibly wild and beautiful haunts raised expectations, but no nesting falcons were found. However, the Arnprior birds demonstrated that released birds breed, and success in other parts of the world are encouraging.

The Canadian Wildlife Service 'hacked' young falcons here in 1985. In 1986 our club purchased two young birds that again were raised in the church.

No birds are being released here this year, and to date, no birds have returned. However, our hopes still live that some day peregrine falcons will once again rule the skies in our area, forming an important part of the local fauna, our rich and fascinating heritage.

Follow the Plantain!

By Jack Gill

In modern times, few of us would consider following this unlovely and persistent weed of lawn and garden anywhere, but to at least one pioneer family of North America the plantain meant nothing less than a signpost to liberty. As a result they have a long line of descendants, still thriving after more than 350 years.

Thomas Eames*, an English colonist, had established a farm and a large family in Framingham, near Boston, Massachusetts by 1675. Unfortunately for him the years 1675 - 1676 were the time of the so-called King Phillip's War.

King Phillip was an Indian chief who induced many of the tribesmen of the region to join him in a concerted effort to drive the English out of "his" country. By dint of surprise raids, these Indians inflicted heavy loss of life and property before they were defeated.

On February first 1675 or 1676, Thomas Eames was away in Boston to buy ammunition when a war party of twelve Indians swooped down on his defenceless farm. Tradition has it that Thomas' wife Mary threw boiling soap at them which she was then making. She had sworn never to be taken alive, but she could not drive the Indians off. She and three or four of her ten children and a daughter-in-law were killed, the rest carried off as prisoners. The house, barn, crops and cattle were all destroyed.

Drake's Old Indian Chronicle gives us one account of the tragedy, and of the extraordinary escape of one of the Eames children, Samuel, in the May following the massacre.

"The next Day (12th of May) a Youth of about 11 Years of Age, made his Escape from the Indians, who was taken Prisoner when his Father's House was burnt and his Mother murdered on the first of February last: and though the Boy knew not a Step of the Way to any English Town and was in continual Danger of the Skulking Indians in the Woods and far from the English, yet God directed him aright and brought him to the sight of **Plantane**, (the herb which the Indians call the English foot because it grows only amongst us, and is not found in the Indian plantations) whereupon he concluded he was not far from some English Town, and accordingly following the Plantane he arrived safe amongst us."

Samuel had been previously instructed in such an event to go in the direction of the rising sun. His "bold and perilous journey" is estimated at between thirty and fifty miles.

The "English foot" was probably Plantago lanceolata, now known as English plantain, a European variety. It has lance-shaped leaves with three to five ribs, short and dense compared to the long spike of common plantain, Plantago major, better known in Canada.

The fate of Samuel's brothers and sisters is partially known. Some of the captives were ransomed, or escaped. Samuel himself lived to have two wives (consecutively) and seven children.

* An ancestor of the writer.

The Plantain was prized as a medicinal herb in the seventeenth century. Nicholas Culpeper, in his Complete Herbal, published in England in 1640, had this to say:

"Mizaldus and some of the astrology physicians say it is an herb of Mars, because it cureth the diseases of the head and privities, which are under the houses of Mars, Aries and Scorpio; the truth is it is under Venus, and cures the head by antipathy to Mars, and the privities by sympathy to Venus; neither is there hardly a martial disease but it cures.

The juice of plantain clarified and drunk for some days, either of itself or in other drink, prevaieth wonderfully against all torments or excoriations in the bowels, stayeth the distillations of rheum from the head, and stayeth all fluxes, and profuse menstruation. It is good to stay spitting of the blood and other bleedings of the mouth, or the making of bloody water, by reason of any ulcer in the reins or bladder, and also the too free bleeding of wounds. It is an especial remedy for those that are troubled with consumption of the lungs, or ulcers of the lungs, or coughs that come of heat...

The herb, but especially the seed, is good against dropsy, the falling sickness, the yellow jaundice, and obstructions of the liver."

Culpeper also used plantain, mixed with other herbs, for treatment of certain eye, ear and mouth diseases, as well as for rabies, ringworm and gout. Early settlers in America relied on Culpeper's ideas, but Field Naturalists are urged to stick to remedies recommended by their own doctor!

A Strange Incident

By Walter Wright.

Last summer I was working in my wood lot. I own three acres and I have laid out gravel walks, planted many crocuses, snowdrops and daffodils etc and have built a grotto.

It was while building this grotto that the following strange incident occurred. A partridge flew to the ground nearby, and after a few minutes flew up to the wall I was building, within a foot of me, but when I slowly moved my hand to touch it, it flew to the ground.

In the weeks that followed it continued to follow me, but would stop when I stopped, never letting me get near enough to touch it. If I ran, it would fly to catch up and then strut along behind me. Often, when I was pushing a wheel barrow, it would dart out in front of me and I would have to stop to avoid running it down.

Eventually I did manage to catch it and I took it into the house to show my wife. I then took it outside, where my wife took a picture of me holding the bird, after which I placed it on the ground. It flew away, and I have not seen it since. I hope I scared it enough that it will stay away from other humans who would perhaps kill it.

I should also mention that one day during the period that the bird was hanging around, I was bringing two friends out from Arnprior for a card game and was telling them about my experience when, lo and behold, there it was running alongside the car.

I can only think that the bird had been raised by someone and had escaped. To prove that this is not a figment of my imagination, I have a picture, and also other people who have seen this.

Editor's note:

An account of a similar experience was published in 1973 in Trail & Landscape, a publication of The Ottawa Field-Naturalists' Club. Written by Mary Anne Phillips, it was called "A Chronicle of Peculiar Behaviour in a Ruffed Grouse". Another such incident was reported in 1957 by Dr. J.W.Groves in The Canadian Field Naturalist.

BUGS

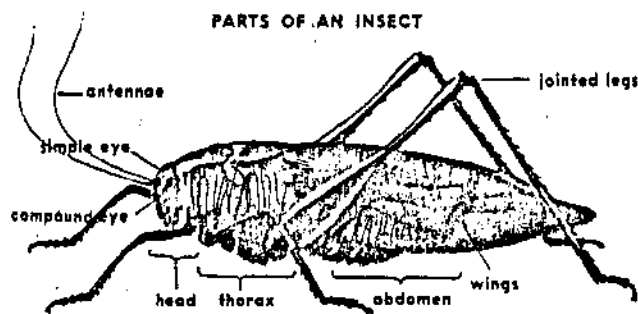
By Michael W. P. Runtz.

Bzzzzzzzzzzzz. Whack! If this memory is evoked whenever you hear the word "bugs" or "insects" then unfortunately your association with this amazing group of animals has been limited to the minority that irritate and annoy. However, if one can temporarily put away this unpleasant recollection and take a closer look at the incredible array of forms and lifestyles that insects display, the feeling of disdain is quickly replaced by one of total fascination.

What is an insect?

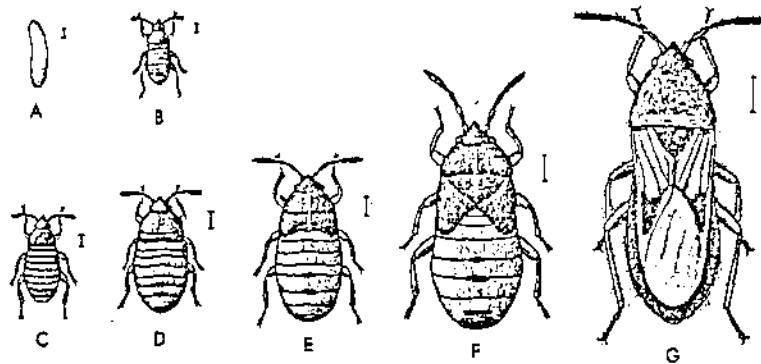
Insects are the most diverse form of animal life in the world. They are characterized by an exoskeleton (a skeleton on the outside of the body) and a breathing system that lacks lungs. Insects generally take air in through tiny holes in the body wall. The air is directed to body tissues by tiny tubes called tracheae and tracheoles. Due to physical limitations imposed by their skeletal and breathing systems, insects never achieve the large sizes that birds or mammals do. Most are less than 6 mm in length.

A general insect body consists of three major sections: the **head** which bears the antennae, eyes and mouthparts; the **thorax** which bears the legs and wings, and the **abdomen** which bears the reproductive organs and in some instances sensory and other specialized structures.

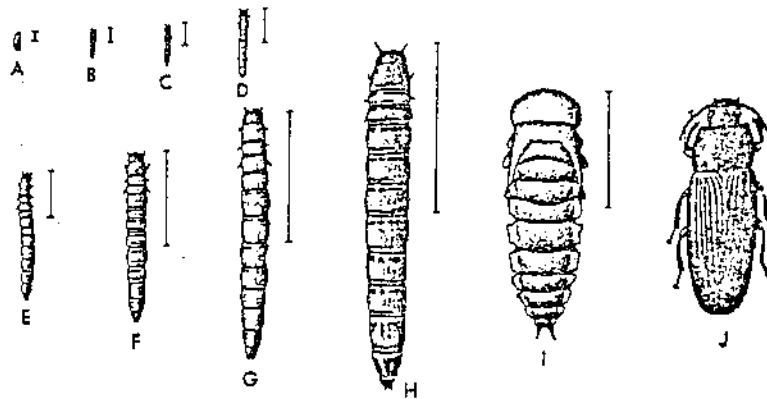


Insects may exhibit radical changes in body form from young to adult stages. The familiar yellow, black and white striped caterpillar feeding on milkweed leaves not even remotely resembles the brilliant orange-and-black-winged Monarch butterfly which it is destined to become! This change from a distinct larval form to a distinct adult form is called complete metamorphosis.

Some insects show little change except in size after they hatch from the egg. The speedy silverfish, that might be an unwelcome guest in your home, has young that are miniature replicas of the adult. This form of development, which we see in grasshoppers, is called simple metamorphosis.



Stages in the development of a bug (simple metamorphosis).
A, egg; B-F, nymphal instars; G, adult.



Stages in the development of a beetle (complete metamorphosis).
A, egg; B-H, larval instars; I, pupa; J, adult.



Some insects not only show difference in form from young to adult stages, but may also live in entirely different habitats. What more extreme change of environment can be demonstrated than that of the dragonfly? The young dragonfly, or nymph, spends its time stalking prey at the bottom of ponds, breathing through rectal gills. The adult rules the skies, snatching mosquitoes and other small insects in flight. Air is taken in through holes (spiracles) on the thorax.

How many types of insects are there?

Due to the vast numbers of insects and their occurrence in every possible habitat on earth, less than half of those that probably exist are known. Presently, over a million different species have been described, which suggests that two or three million different types might some day be known! When you consider that there are fewer than 9,000 species of birds in the world, the diversity of insects is mind-boggling.

The study of insects is known as **entomology**, and one who studies insects is called an entomologist.

How do insects feed?

Insects have been able to exploit many different sources of food and in doing so have evolved many different forms of mouthparts. There are two general forms - chewing and sucking - but there are many variations of these two basic types. Insects with chewing mouthparts have mandibles that move sideways. Dragonflies (Odonata), earwigs (Dermaptera), beetles (Coleoptera) and bees and wasps (Hymenoptera) all have chewing mouthparts. Aphids and cicadas (Homoptera), stinkbugs, bedbugs and water boatmen (Siphonaptera) and butterflies and moths (Lepidoptera) all have forms of sucking mouthparts.

Can all insects fly?

Although the power of flight is a feature that separates insects from all other invertebrates (animals without backbones, i.e. spiders, worms, centipedes), many insects cannot fly. Flightless insects include springtails (Collembola), fleas (Siphonaptera) and lice (Mallophaga and Anoplura.) There are flightless representatives of groups that can fly. There are flightless beetles and wasps, for example..

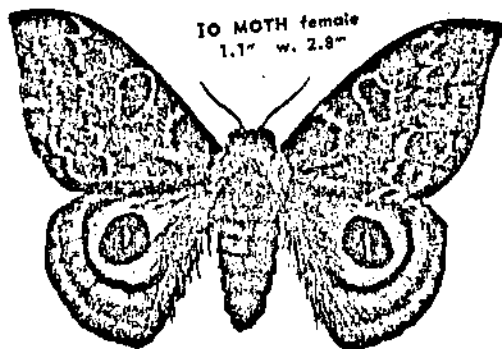
Now that we've had a very brief and general introduction to insects, let's have a look at some of the really neat and exciting features of this amazing group of animals.

Some of the most intriguing examples of animal defense are found in the insect world. Many insects are able to defend themselves with chemical warfare. When confronted by an enemy, the bombardier beetle quickly turns around, raising his abdomen towards the attacker. Suddenly a 'pop' followed by a puff of smoke is issued out the back end. This spray of hot burning quinones is enough to discourage most would-be attackers.

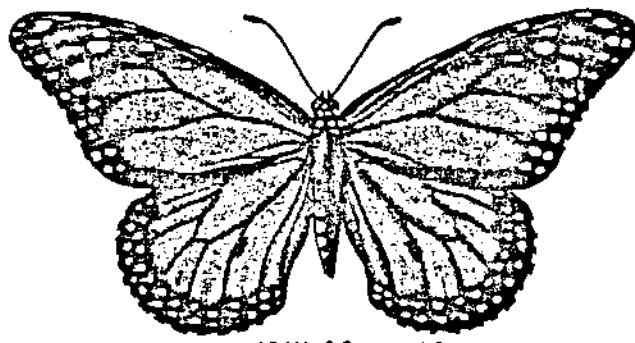


Other beetles exude unpleasant substances if handled. The blister beetles are appropriately named for if handled, the commoner species exude the chemical cantharadin which actually causes the skin to blister.

Even caterpillars are not defenceless. If the black swallowtail butterfly caterpillar is agitated, two bright orange horns suddenly pop out of its head. If the attacker happens to touch these, an extremely sticky substance is released. Some caterpillars are covered in spines. These spines are not only prickly, but often contain poison. Beware handling caterpillars of the io moth!



IO MOTH female
1.1" w. 2.8"



MONARCH 1.3" w. 4.0"

Not all insect defences are quite so drastic. Much of insect defence is pure bluff. Many moths, caterpillars and some beetles have very large spots, resembling the eyes of a giant, as part of their defence. Often these 'eyes' are hidden from view, so that the sudden appearance of them shocks the predator.

Brightly coloured insects are often conspicuous for a good reason. Eat them and pay the consequences, for often they contain poisonous compounds. The monarch butterfly caterpillar feeds on milkweeds that contain cardioglucosides. The adult butterfly also retains these chemicals. If eaten by a bird, the chemical results in vomiting. The bird learns that a bright orange and black butterfly is bad to eat, and avoids further meals of this sort. Thus the bright coloration serves as a warning. However, even the insect world has cheaters. A quite edible butterfly, the viceroy, very closely resembles the monarch. If birds avoid the bold orange and black pattern of the monarch, they also avoid the viceroy. This imitation of a poisonous species by an edible species is known as Batesian mimicry. We are all familiar with the bold black and yellow coloration of the stinging yellowjackets and hornets. However, non-stinging wasps and even some flies imitate this pattern and may be avoided by potential predators.

Perhaps one of the commonest methods of defence by insects is that of camouflage. Many insects are perfect replicas of the substrate on which they rest. The walking stick resembles a twig, while many resting moths resemble bark on trees. One of the more interesting forms of disguise is employed by the caterpillars of the giant swallowtail butterfly. These brown and white lumps look exactly like bird droppings on a leaf!

Most insects lay their eggs in an appropriate location. Butterflies and moths generally lay the eggs on the plant on which the caterpillars feed. The eggs are left to hatch on their own. Many wasps are parasites of other insects. Ichneumon wasps often seek out caterpillars or grubs on which they lay their eggs. When the eggs hatch, the larvae eat the host. Some insects hold the eggs inside until they hatch. For example, the sheep bot fly will fly up the nose of a sheep and eject living larvae into the sheep's nostril. (Rarely into man's!)

Some insects provide care for their eggs. The giant water bug female glues her eggs to the back of the male who must transport them around, offering protection until they hatch. Carrion beetles will bury a mouse

which they have skinned. The eggs are laid in the burrow, and the parents may even feed the young! Some insects even live in colonies where workers care for the young. Ants and bees have evolved well structured societies.

Insect courtship can be elaborate and complicated. Some moth females release chemicals (pheromones) to attract males. The male's antennae pick up the scent, sometimes from as far away as a mile! Scorpionfly (Mecoptera) males capture prey items to offer as nuptial gifts to the females. Mayfly (Ephemeroptera) makes form mating swarms into which females enter. Many insects such as crickets and grasshoppers (Orthoptera) produce sound by rubbing body parts together (stridulation) in order to attract mates.

Insects cannot be talked about without reference to the incredible array of colours and forms that they possess. A strong hand lens or dissecting microscope will open the doors into another world. Many of the body parts of insects are modified into bizarre structures for specialized functions, and these cannot be appreciated without higher magnification. It is truly an amazing experience to examine what appears to be an obscure small insect under higher power, an experience that may change the observer into an insect fan.

Of course, the important role that insects play in the pollination of flowers, in the breakdown of dead material and as food for other living organisms cannot be overemphasized.

The study of insects is a rewarding one, for you never run out of possibilities to look at. Insect collections are easy to make, take up little space, and with a few precautions will provide endless years of enjoyment. Or, if you prefer photography, insects provide you with limitless subjects of an infinite variety of colour and form.

Today, many excellent books on insects are available. I would recommend the following for a general introduction to insect groups:

A Field Guide to the Insects by Borrer & White (Peterson Field Guide)
A Field Guide to the Butterflies by Klots (Peterson Field Guide)
A Field Guide to the Moths by Covell (Peterson Field Guide.)

An Introduction to the Study of Insects by Borrer, Delong & Triplehorn.

A light-hearted look at Owl-hooting,
Macnamara style.

By Marjorie Boyle.

When spring comes to the Ottawa Valley, interesting things begin to happen. The melting snows level off as clear cold water and the abundant supply which cannot immediately escape to streams which eventually lead to oceans, lies entrapped in ponds and swamps, nurturing the land and making a habitat for a myriad of creatures. The woodlands, growing along the edges of these boggy areas, provide an inviting environment for a few species of owl that either winter in this area or migratenorth each year, establishing their territory and then seeking a mate to share their kingdom, and the joys of parenthood

An OWL-HOOT - in case you would like to be informed - is a game, albeit one with an altruistic purpose, that requires three types of participants:

1. One or more persons who can realistically imitate the call of the owl in question;
2. Owls to hoot back: after all, it takes two sides to make this game work;
3. Observers, though we could be considered dispensable! But this is where we, the members of the Field Club, fit in; eager to view, and learn more of nature's world around us, enjoying ourselves while doing so.

Since most owls are nocturnal creatures it follows that our annual HOOT is scheduled for a late/early spring evening. Is is a popular event in our club, so a good number of members (25 plus) gather at our regularly appointed place , suitably attired for a cool March evening, and all eager to get on our way.

. First, there are a few rules and precautions to be reviewed. 1. Too many cars caravanning along a country road are apt to disturb and even annoy nature's population out there. Therefore we will fill the cars, taking as few as possible.

2. When we park, be careful! Road shoulders are soft at this time of year with an irresponsible sense of humour. When we step out of the car into the dark of a moonless night we could end up seat-deep in the cold, clear waters of a bog nestled close to the shoulders of the road.

3. Please be careful not to slam car doors. Nothing like ten or more car doors slamming at regular intervals to disturb the tranquillity of a marsh evening!

4. It is also to our advantage to keep conversation to a minimum, the better to hear both the owls and our HOOT guide.

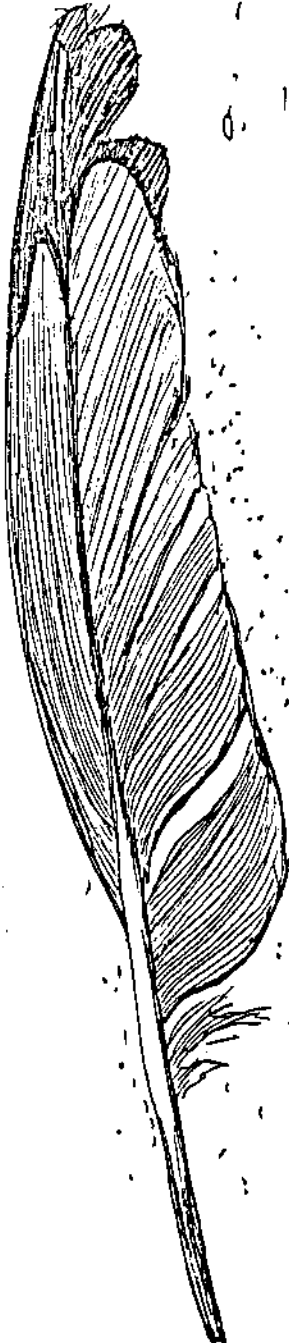
Our first stop on this particular 25 mile route out of Arnprior was near the Pakenham-Waba junction. The evening light still quite good. We lined up, more or less along the edge of the road, peering into the trees where a screech owl has been claiming territory for some time.

One or two talented hooters called to Screech Owl; soft, tremulous purrs and trills. No response to repeated efforts. Either Screech Owl was not at home or he was not impressed with our renditions of his Indian Love Call.

Into our cars and on to the next hopeful location. This time our hooters sent out a call to attract a barred owl: "hoo hoo hoo hoo hoo hoo hoo-aw!" (Thus giving us the name of this game.)

We thought we heard a response. What we definitely did hear was the evident delight of a dog nearby, answering loud and clear, in his tongue, to the detriment of our success in making contact with our owl.

On to stop three. This location offered joyful sounds of wood frogs and spring peepers, and an anxious mother, (human) repeatedly calling her son. No owls. Our next stop put us in front of a wooded grove on the White Lake road, north side of the hill. We lined up along the side of the road as usual. On other such trips we have been the concern and/or interest of passing motorists.



("Has there been an accident? Well, what *are* you doing? Ha ha ha!")

The ditch in front of us is shallow and partially filled with boulders and provides necessary shelter for the little blue-spotted salamander that one of our group espied. This little six-inch amphibious reptile reposed in the palm of Mike's hand long enough for each of us to view him. Then he was returned to his haven among the rocks, none the worse for his experience; a beautiful creature.

Our attention returned to owls and again the hoo hoo hoo hoo hoo hoo hooo-ow call of the barred owl, and again and agin from another hooter, and the cries of a rodent, suddenly the victim of this great bird of prey. Finally a response! These untrained ears of mine could not distinguish a difference of sound but we observers could sense success. A flutter of wings through the trees. A landing in the higher branches of an ash tree in front of us and a beam of a flashlight illumined Barred Owl, seeming to gaze down on us inscrutably from his perch, as if to say "what are you foolish humans up to now?"

He sat there in the spotlight long enough for us to imprint his image on our memories, then turned and flew back to his private retreat, leaving us to appreciate our good fortune. At that point in time the evening was declared a success.

Several more stops followed, each one providing a point of interest, whether or not we contacted an owl. One such stop was to allow Mike to escort a young muskrat off the road, lest he become a road-kill and nothing but a memory to his relatives. Mike hustled along behind the animal, keeping him in the beam of a flashlight until Muskrat finally gathered his wits and disappeared into the water adjacent to the road.

Sounds of the night were many. A coyote in the distance, calling to a mate. Frogs, practising their spring chorale. Beavers, slapping the surface of the pond waters with their tails, warning all locals of intruders in the area. This writer had her hearing aid volume turned up some to catch the unidentifiable whispers on the night air and the squish of boots on muddy roads and so the beaver's warning slaps sound like sound barriers being broken.

At last we raised the interest of a great horned owl. He answered the three note hoo hoo hoo- Hoo Hoo and a three point conversation ensued between Owl and hooters, (not a word of which I understood!) However, he could not be persuaded to leave his sanctum and we had to content ourselves with just having made contact.

Screech owls and saw-whets were not available this evening, but our three-hour adventure was capped by seeing another muskrat swimming beyond sight and sound of us as a beaver slapped a final warning to all. It was time to say, as Christopher Robin and Pooh Bear would, "Thank you, Lord, for a lovely day" and take ourselves home to our world. And thank you, Michael Runtz.

Post-script, April 3, 1986.

Hubby and I travelled this same route a few days later to see it by daylight. Along the White Lake road we sat and watched a marsh hawk work the fields in search of food. At one of the ponds along the Bellamy Road we came upon a great blue heron perched statue-like, knee-deep in water. Even though my camera was prepared and set, the sound of the car on the road was enough to urge him to take wing. I could not get the car window rolled down and camera aimed quickly enough to get a picture. Such are the pleasures and after-pleasures of an OWL-HOOT, Macnamara style.

Contributed by Helga Jacobs.

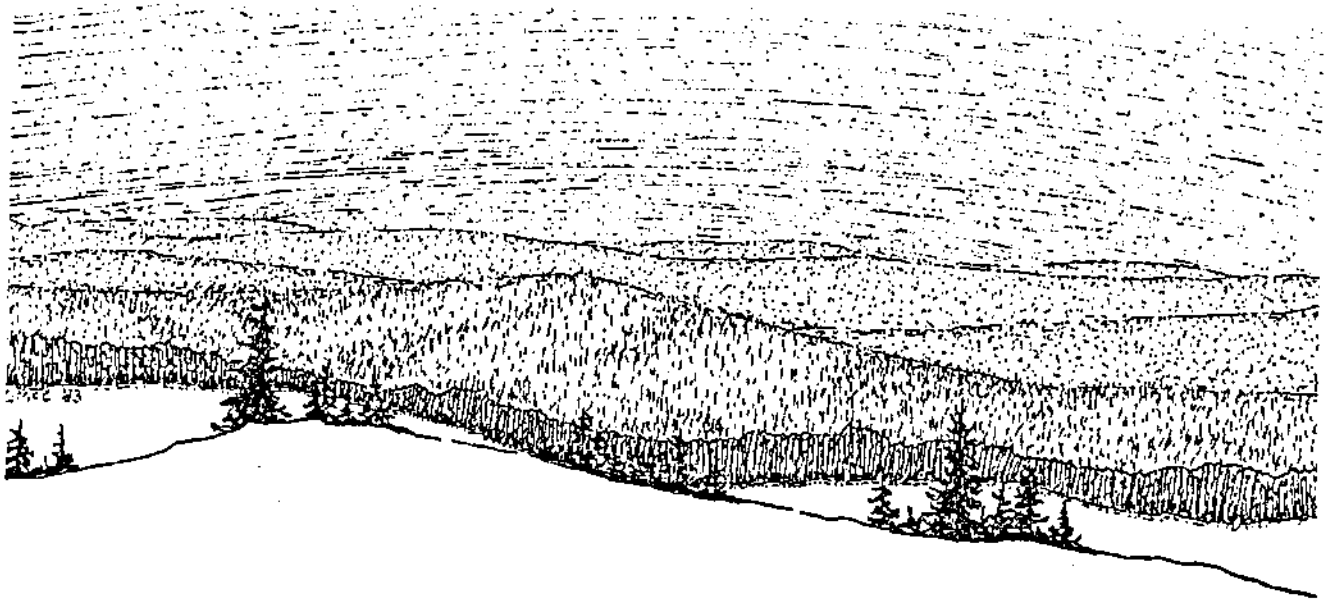
Poisonous Plants.

Did you know that almost all parts of the American Yew (*taxus canadensis*), the berries and roots of the Red Baneberry (*Actaea rubra*) and the sap of all buttercups is poisonous?

From Magic & Medicine of Plants.

What is a Meerkat? It's found in southern Africa, is about the size of a housecat, but it's really in the mongoose family. It preys on rodents, but unlike a real cat it burrows as deep as ten feet underground.

From Coop Extension Service, Colorado State University.



From the editor's desk: by Carol Bennett.

One of the more interesting things about spring is watching the birds build their nests. Once in a while the bird watcher is privileged to see some behaviour which is positively strange. Some years ago, when we still had elms in our neighbourhood, I watched a pair of Baltimore orioles building a nest in one. At least, the male was doing the building; his mate was sitting on a nearby fence and criticising. She had good cause. For some reason Mr oriole was making a hash of the job. This was not one of those neat little purses which usually dangle from a tree inhabited by an oriole family. No, this was lop-sided and pieces of material were sticking out at all angles.

His mate began to scold. He tried again, but still nothing went right. He went to sit beside her on the fence, thoroughly cowed. Finally the female oriole could stand it no longer. She attacked him with beak and wings and then she went on up and gave the useless nest the same treatment. Finally they both flew away. They didn't return to that tree and I often wonder if they obtained a divorce, bird-style.

On another occasion I saw a female hairy woodpecker making a hole in a tree. I guessed that it was a nesting cavity because every once in a while she would stop work and try it on for size. She would pop her head inside and then give some mighty wriggles, trying to get her hips through the hole, like a size 14 matron struggling to put on a size 12 dress. Finally she sat back, put her head on one side, and gave a shriek of satisfaction. There is nothing like completing a job well done.

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