

The
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ROYAL VISITORS

COVER PICTURE AND STORY

By Philip J. Croft

Last summer, owing to delicate "banding" experiments performed by the University of Toronto, the Monarch Butterfly managed to make headlines in our West Coast newspapers. Specimens of the insect, marked with minute wing-tags, were released in Ontario and in due course appeared in Victoria and Vancouver, having apparently travelled southwest to California (as so many well-heeled Torontonians do) and, presumably heeding Horace Greely's famous advice, diverted their return migration in order to stay on the irresistible West Coast.

The Monarch, Milkweed, Black-veined Brown or "King Billy" butterfly, Anosia(Danais) plexippus, is perhaps this continent's best known butterfly, having been made famous not only by its remarkable long-distance migrations, but, just as human beings are often promoted in fame by their imitators, so the Monarch has become well known from the astonishing example of Batesian mimicry provided by its imitator the Viceroy (Basilarchia dissippus). The Monarch belongs to a large group of mostly tropical butterflies, all of whose species are "protected", seemingly by being unpalatable in all stages to avian predators and so recognized by them by a distinctive coloration. The Viceroy, belonging to an entirely different genus and not "protected" by unpalatability has in this particular instance developed, presumably through aeons of natural selection, a colour scheme in the mature insect so closely resembling that of the Monarch that birds are supposed to be "fooled" and the Viceroy species to enjoy a measure of protection therefrom.

Modern students are inclined to doubt whether the operation of this protective mimicry is really as simple and "pat" as was believed by Charles Darwin in his "Origin of Species by Natural Selection" and in spite of intense study the matter remains to a considerable extent in the realm of speculative theory, since it is most difficult to know what is the real nature of the inhibitions which deter birds and other predators from attacking this insect or that. Nevertheless, there are numerous well-nigh incredible examples of such imitation in the insect world, sufficient to fill the most blase' of scientists with a sense of humility and wonder.

The Monarch, a large and noble-looking insect, is not commonly seen on the British Columbia coast, as its food plants, the various species of milkweed (Asclepias) do not occur here as native plants. Common most years in eastern Canada, the Monarch is a most attractive and interesting creature to observe, study and (to this writer) to photograph. Last summer, in order, among other things, to complete a series of colour slides and motion pictures of the life-cycle of the Monarch, I left for my summer vacation somewhat earlier than usual, arriving at my summer home in the Ontario lake-land about the third week in June, when the meadow along the neighbouring brook was still bright with ox-eye daisies, clover, Joe Pye weed, cardinal flower and common milkweed (A. syriaca) yet only in bud. In the blazing mid-summer sun, several Monarch butterflies, rather battered and worn from the long trip south, were sailing above the sweet clover and here and there a pair could be seen mating in flight or on a flower head or nearby hazel tree. During the ensuing week, from time to time, a female would be observed dropping down from mid-flight and pausing for an instant only on the leaf of a milkweed plant, curling the black hind-body under the surface of the leaf, then dashing off again. As it was impossible to predict where and when this would take place, I was unable to obtain either still or motion picture records of this rapid manoeuvre, but in each case, a close scrutiny with a hand lens would reveal a single egg, deposited by the female butterfly during the momentary stop-over, securely glued to the stem or undersurface of the leaf, a beautiful pale green filbert-shaped object, wonderfully fluted from pole to base, with "lines of longitude" and encircled throughout with a myriad of much

finer "parallels of latitude". By carrying one of the plants so visited to a windless spot where a suitable set-up could be made, I was able to obtain satisfactory pictures of the eggs at extremely close range, and was also fortunate enough to be on hand, a few days later, when a minute black spot appeared on the surface of one of the eggs and a tiny caterpillar, greenish-white with a black head, forced its way through the side of the egg and forth with fell-to upon its first meal by devouring the remains of its late home, commencing with the placenta and finishing with the shell, until only a faint trace of the adhesive ring could be seen on the surface of the leaf. This done, the new-born larva, without asking permission to leave the table, moved off along the leaf in search of a spot to its liking, there to start excavation of a small hole in the surface, so commencing a vegetarian banquet which would last with little interruption for three or four weeks.

Interruptions there are, however, in the caterpillar's lifelong meal, and these are occasioned by skin-changes, four or five in number, which permit the animal to grow. These are brief, but critical and vulnerable periods in the insect's life-cycle. After the first of these, the Monarch, though still very small, receives its distinguishing badge, the bold and striking mature coloration -- on a green base a body-length football-jersey of yellow, white and black rings, with two pairs of black threadlike organs protruding from the upper side, one pair ahead and one astern. As the larva grows, the forward pair of these organs becomes relatively longer than the after pair and apparently becomes increasingly tactile, for when the mature caterpillar is feeding on the edge of a leaf, these organs are never still, waving and quivering as though in suppressed excitement about the great change to come. Indeed, the fully grown Monarch caterpillar, almost three inches long, is an arresting creature and handsome -- insofar as a crawling grub may be said to be handsome.

As the last days of my stay at Georgian Bay drew on, I began to search diligently, but unsuccessfully among the well-stripped milkweed plants in order to find Monarchs that had already become chrysalids. Early in the search, I was startled by the warning buzz of a rattlesnake upon which I almost stepped (in running shoes and bare ankles) and, considering discretion the better part of valour,

waited for the actual moment of departure and brought back with me in the jet to Vancouver a group of full-grown caterpillars and a handful of milkweed plants for their continued sustenance. Upon arrival at my home in West Vancouver, I found that all the caterpillars had spun buttons of silk upon the leaf ribs or inside of the carton and were hanging by their tails, slightly curled, like an inverted question mark, awaiting the next phase of their cycle. The following day, all had become chrysalids and I was thus able at leisure to photograph both these stages.

Monarch pupa is a beautiful and jewel-like object. Thimble-shaped, it is of the purest, palest emerald green colour, with a ring of tiny bosses of metallic gold surrounding it, as it hangs vertically from a small black "cremaster" or hook. The pale blue-green colouring evidently belongs to the inner tissues, the outer integument being a clear, transparent membrane of great delicacy. For, after a week or ten days, a great colour change takes place and just before emergence, the hues of the mature insect may plainly be seen, glossy black body spotted with white, and golden orange-brown wings veined in black and spotted with white.

The final miracle of emergence is too well known and too proverbial to require description -- certainly not to naturalist readers. The instant of break-through, the butterfly's moment of truth -- the immediate frantic struggle for a secure foot-hold on the empty chrysalis skin; the heavy bloated body and small, thick inadequate wings; the marvelous change as the body fluids are slowly and rhythmically pumped into tubular wing ribs; the reduction of the body to slender, graceful proportions, the expanding of the glorious pinions to full length and breadth, and their hardening and stiffening into strong, useful organs; and the final few trial wing-beats before the joyous take-off into the sunshine of fulfilment. All this, readers, is school-boy lore. But I have never yet been able to witness it without becoming choked up with wonder and gratitude to my Creator.

Of the ten caterpillars brought back to Vancouver, three perished in the pupal stage and failed to emerge. The remaining seven, four boys and three girls, I released as they emerged, since I am not making a collection. They found in West Vancouver flower gardens an abundance in which to feed, play and make love; but, frustratingly, no

milkweeds on which to lay eggs. I wonder what they did? I had not the wherewithall to try tagging them, so I shall never know.

Photographically, this natural history adventure has (with one or two minor exceptions) been satisfactory and rewarding, recalling halcyon days doing the things one loves best to do. I blush to think how many hours I spent standing, crouching, kneeling, lying, peering and squinting in that flower-decked meadow! But, with three weeks of leisure in unspoiled country, unparalleled good weather, an understanding family and a modicum of top-flight photographic equipment, what amateur naturalist would not be happy?

BIRDS FOR THE RECORD

- | | | |
|---|------------|--------------------------|
| Cinnamon teal (a) - "Poynter's Puddle" | March 21 - | R. Becket |
| Mountain quail (1) Munn Road - - - - | March 17 - | R. Fryer |
| Marsh hawk (1) - Island View Beach - | April 4 - | R. Becket |
| Horned lark (4) - Island View Beach - | April 4 - | R. Becket |
| Lincoln's sparrow (1) St. Patrick St. - | April 6 - | Grace Bell |
| Mountain bluebird (3) Saltspring Island | April 10 - | Mr. & Mrs. A.R. Davidson |
| Townsend's solitaire (1) Salsbury Way | April 10 - | D. Stirling |
| Great horned owls nesting on the Rithet Estate during early April (A young bird was removed from the nest by a falconer.) | | |

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MUSHROOMS IN MAY

By Katherine Sherman

Last October some 44 members of the Natural History Society enjoyed the annual Fungus Foray in the nice moist woods of Francis Park - the sort of place and the sort of time when you expect to find mushrooms. Imagine then our surprise last May, when visiting in Cashmere in the dry belt of Washington, our friends announced they were going mushrooming! Needless to say, we asked if we might join. For them, "Operation Morel" was an annual and very profitable affair during which, in a good year, they collect as much as 80 lbs. of this special mushroom.

Next morning, at 8 a.m., armed with two walkie-talkies and numerous plastic pails, we headed for the Blewitt Pass. At about the 5000 foot level we turned off and followed a logging road until snow made further travel hazardous. Alas, 1964, with its chilly, late spring, proved to be a bad season for morels, but we marvelled how the experienced eyes managed to detect as many as they did on the dark, needle-covered floor of the forest; often on the very edge of a snow bank. We were hailed on and snowed on, but were comforted every half-hour when re-assuring checks with the walkie-talkies revealed no one was lost! It wasn't only familiar morels we gathered. We became acquainted for the first time with brain fungus or false morel. These, a little less drab in colour than true morels, caused special rejoicing, as they were larger and much heavier than the others.

That night, we enjoyed a feast of both sorts of mushrooms, but of the two, we thought the brain fungus the more delectable. The surplus mushrooms were sautéed and put in the freezer.

On our arrival home from our holiday, the May issue of the Victoria Naturalist was awaiting us, and in it the article by Dr. Szczawinski on the morels - true and false. The false morel, we learned, was very risky, and to certain people and under certain circumstances, could

be very poisonous. (We then remembered how the brain fungus sometimes showed a grey discoloration on the cut stem. Our friends had always carefully removed this part on the grounds that it didn't taste nice. Could this be the part that contained the poison?) We debated the whole matter. Should we spoil our friends' enjoyment and also deplete their freezers by telling them of the possible dangers? On the other hand, could we sleep at night knowing of these risks? We decided to send them the Magazine, and to let them do the deciding.

We heard later that our mushroom-hunting friends had read the article "with great interest", but we gathered their appetites for morels - true and false - remained as avid as ever. Incidentally, these enterprising folk mentioned that they had since been out collecting "corals", another fungus almost as delicious as the morels.

BERRIES

By Ted Underhill

First, let us define our subject. What is a berry?

Throughout this discussion I shall apply the term to all the native fleshy fruits of B.C. This is in accordance with common usage, but it is fairly important that you realize that this definition is not that of the professional botanist. Botanically the term "berry" applies to a much more restricted group. Thus, our wild cherries or plums bear drupes - not berries. Our blackberries and raspberries are aggregate drupes or drupels, and the delicious wild strawberry is a compound "spurious fruit" made up of many achenes. However, for our purposes, we shall lump all of these in with the true berries.

Having thus established the fact that I'm in botanical error from the outset, let us go on to examine our subject in more detail.

For berries to be of such frequent occurrence throughout the kingdom of plants, they must be of some use to the plants that bear them. This use is pretty obvious. They are simply a very successful - and thus widely used means by which plants may accomplish the

dispersal of their seeds.

Many other plants use catapult systems, censer systems, or various other mechanical means to disperse their seeds, or rely upon the forces of wind or water to do the task. Gravity often imposes a severe limitation upon the distance the seeds are likely to be moved, though in various ways some plants have contrived to overcome this problem. With succulent berries, however, the plants we are dealing with have enlisted the aid of the animal kingdom. The travels of their seeds are limited only by the mobility of the animal that chooses to do the carrying.

Berries - using the broad definition mentioned earlier - consist of a more or less hard seed accompanied by, or often enclosed within, a mass of fleshy and perhaps juicy pulp. In most cases, the whole fruit is eaten by the animal, and the seeds carried some distance before being excreted. In other cases the fruit is torn apart, the fleshy pulp consumed, and the seeds dropped without ingestion. Most berries have their seeds so protected by a hard integument that they are able to withstand passage through the digestive tract without normally losing germinative ability. Indeed, it has been shown that in many instances the seeds passed through animal carriers show faster and stronger germination than similar seeds not so treated.

Consider how much the plant has accomplished by wrapping its seed into a tasty berry. First, it has increased the chances that its seeds will be widely dispersed and thus increased the probability that some of these seeds will fall where there are the right conditions of light, water, and temperature for successful growth. Then, it has its seeds deposited in a condition favouring good germination, accompanied by a supply of nutritious fertilizer upon which the young seedling may thrive.

Most of our native berries are red or reddish - a fact that very likely has some significance. Certain colours are more visible to the human eye than others - notably those between red and yellow in our visible spectrum. In a very general way, it may be said that these same colours are those most readily seen by most other higher animals. It is altogether likely then that the red colours of berries are there because they

most efficiently attract the attention of the animal seed carriers.

It is interesting to conjecture further on this matter of colour. Insects see further into the blue and ultra-violet end of the spectrum than we do, but are mostly relatively insensitive to the reds and yellows. This is why we use yellow lights on porches so as not to attract insects. Can we then assume that redness in berries helps to minimize attacks upon them by insects - thus increasing the probability that they will be picked up by animals? It would be interesting to explore this question.

Berries are a comparatively recent innovation in the plant world, though they have been around quite a few millions of years. No one plant or plant family can take exclusive credit for their invention, for they have been evolved quite independently by many unrelated and well separated plant groups. Nor did they come into being suddenly, but probably with infinite slowness by a progression through many intermediate stages. Undoubtedly, many plants we know today are still in the process of evolving berries.

Before there were berries, all plant fruits were dry - as many of them still are to this day. The change appears to have come about mainly in response to the fact that fruits bearing tasty, succulent flesh were more apt to be eaten or carried by animals, and were thus more apt to succeed in producing new generations to carry on the characteristic of fleshiness. I'm sure you've all heard the term "selection pressure". Well, this was simply selection pressure favouring the preservation of plant variations involving greater edibility of the fruit.

Very likely some of the partially fleshy fruits we know today - the wild rose, for example - are on their way to developing berries.

It is interesting to ask ourselves why our part of the world is so abundantly endowed with berried plants, whereas other areas - notably the tropics - have a much greater preponderance of larger fruits. One university professor to whom I put this question suggested that this situation reflected the fact that growing conditions are much easier - in some ways - for the jungle plants. The plants need only put out comparatively few seeds to accomplish what little regeneration is necessary to fill

the occasional gaps. Germination takes place readily, and there is no particular need for the plant to put out great quantities of seed or to disperse it widely.

At a glance it might appear that we have rather similar conditions in our moist coastal forests - and in some ways we do. But that isn't where you'll find the majority of the berry-bearing plants. Most of them are plants of the open places and sunlight - old burns, slide areas, creek banks, swamp margins, and rocky or gravelly knolls. But, in this raw young land of burns and slides and changing water courses, these habitats are rather temporary. To meet this situation the plants that would inhabit these places must enjoy a relatively high degree of mobility and, preferably, a fair abundance of seed. Berries of small size seem to be a highly successful answer to the problem.

Notice too, that comparatively few annuals bear berries. I can't think of any annuals in British Columbia that bear berries. Why? Well, it seems reasonable to suppose that one factor is that the annuals don't need to move their seed away from the competition of the parent plant. It's gone anyway. But this hardly seems sufficient reason when we consider that these, in general, are plants of the same open habitats as the berried plants, and that they must be subject to the same needs for dispersal.

It is also interesting to observe that most small birds and mammals occupy the same clearings and forest edges as do the berried plants. There are quite remarkable examples of the community of life, with the lives of plant and animal members interdependent to a very considerable degree. It seems a pity that although there is so much of this all about us, it is so seldom understood or, indeed, even observed.

PHOTO AWARD

Members will be interested to learn that our editor, Bill Reith, recently won three awards in the 1964-65 "Cover Photo" contest sponsored by Parks and Recreation Magazine. This magazine, the publication of the American Institute of Park Executives, holds an annual photo con-

test. Of the 195 entries submitted this year, twelve were chosen for covers for the magazine and nine were given special mention.

Mr. Reith's entry, made through the Provincial Parks Branch, won two cover photos and one special mention and was the only triple award winner. It is significant that the British Columbia entry was the only Canadian award winner. Congratulations, Bill.

M.M.

Thank you, Murray, for the kind words. Ed.

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A BREEDING BIRD CENSUS

By David Stirling

Readers of Audubon Field Notes will be familiar with a breeding bird census. No census had been taken of Coast Forest type until 1962, when Parks Branch staff censused Miracle Beach and Goldstream Parks. In 1963, another census of Coast Forest was conducted at Alouette Lake.

In May and June, 1963, I conducted almost daily observations on the bird population in the vicinity of 329 Island Highway, View Royal, in order to determine the species and numbers of breeding birds in a well-wooded residential district. The area under observation consisted of about four acres of rugged, rocky terrain, of which 1½ acres was houses, lawns and gardens, and 2½ acres disturbed coast forest. Predominant trees were Douglas fir, grand fir, broad-leaf maple and arbutus.

The census was based on the incidence of singing males, and the number of nests and broods seen. Only males that sang consistently through the two month period were counted; others were listed as visitors. Numbers refer to number of pairs.

(continued over)

Breeding Species in order of abundance:

Crow 2; Robin 2; Yellow Warbler 2; House sparrow 2; Red-breasted Nuthatch 2, Towhee 2; California Quail 1 (brood of 10); Pheasant 1; Swainson's Thrush 1; Western Flycatcher 1; McGillivray's Warbler 1; Starling 1; Warbling Vireo; Solitary Vireo 1; Golden-crowned Kinglet 1; Song Sparrow 1; Bewick's Wren 1; Purple Finch 1; Rufous Hummingbird 1; Wilson's Warbler 1; Orange-crowned Warbler 1; House Wren 1.

Total species - 21, territorial males - 28.

The number of birds in this small plot is surprising. For comparison:

Miracle Beach (59 acres censused) 32 species, 121 territorial males; Goldstream (54.5 acres) 23 species, 97 territorial males; Alouette Lake (15.8 acres) 20 species, 57 territorial males.

Visitors:

Great Blue Heron, Red-tailed Hawk, Bald Eagle, Glaucous-winged Gull, Nighthawk, Downy Woodpecker, Western Wood Pewee, Olive-sided Flycatcher, Violet-green Swallow, Barn Swallow, Cliff Swallow, Purple Martin, Raven, Bush-tit, Black-headed Grosbeak, Evening Grosbeak, House Finch, Pine Siskin, Goldfinch, Red Crossbill.

SWALLOWS

By Eve Smith

I never saw swallows eat on the ground until this year, shortly after reading about this matter in the May issue of "Victoria Naturalist". At Easter we had acquired two ponies and their paddock is in front of the cabin, so we have a good view of what is going on. The swallows, as far as I could make out, came down for tasty goodies found in the manure. I saw several of them on several occasions, and I must remember to watch next year.

For the past ten years that I know of (and probably a lot longer) violet greens have nested in a hole in the old oak tree out in front. I wonder if it is the same pair and their descendents, but I don't know. (I'm not well enough acquainted with swallows and their customs.)

The method of feeding their young is interesting.

Four young ones sit on the patio at the top of the hole, while the parents fly round unceasingly for insects, and then always feeding the baby in number four position. When that member has had enough, by some signal I assume, number one moves into four's position, and so on down the line.

Once the juveniles are ready for flying the parents fly in and out, in and out, encouraging them to take the plunge.

One time a baby fell from their patio and some children who were visiting were very anxious, so they got the extension ladder and put it back on a high branch where it sat till it flew away.

Now in November, the swallows have gone and we hope that they will not run into man made hazards, such as insecticides, on their long migrations.

We have juncos and wrens and woodpeckers and other companions for the winter months.

MACMILLAN PARK

by R.Y.Edwards

Cathedral Grove, in Macmillan Park, brings out the naturalist in most people. Here is nature as impressive as few people in our urban world have ever seen. The great trees soar up to monumental heights, and a green half light intensifies the greens of sword ferns and mosses on the forest floor beneath. Except for the noise of traffic on the highway nearby, one seems far from the world of men, for this is a world dominated by plants.

Whenever I go to Cathedral Grove, I have mixed feelings about man's wisdom in preserving nature. Here is a bit of nature generously given to posterity by a famous man, Mr. H.R.Macmillan, but at the same time I am impressed by the fact that British Columbia is famous as a place with big trees, yet this small grove is about the only place where you can easily show a prairie friend that plants are sometimes higher than a prairie grain elevator. Except for one act of generosity, three generations of British Columbians have let a natural treasure

disappear into sawmills.

By chance, a few other impressive stands still grow in out of the way valleys where they are more or less unknown. They are few, they are in most cases not protected, and they will probably never be located where people will see them without feeling they have made a special effort. Even if they escape the saw, they will appear to be something freakishly different that was discovered off the beaten track.

So Cathedral Grove, 15 miles west of Parksville, is valuable, not only because it is impressive, but because it stands almost alone, and because it shows as no other forest may do, what grandeur once stood beside old trails and old roads in British Columbia.

Most of the huge trees in this park are Douglas fir with some grand fir and a few red cedar. Almost as impressive are the ferns and mosses beneath. Birds are few. Some winter wrens on the floor and some golden-crowned kinglets high in the canopy may be the only species, reminding us that the mature old forests, once so common, were poor places for birds. But you can't have everything. With plants like these, even a birdwatcher can temporarily do without birds.

EDITOR'S COMMENTS

Once again, we have come to the end of our year, the Annual General Meeting will be held in a few days, and this, the Ninth Issue of Volume 21 of The Victoria Naturalist, is the last issue until autumn.

This time last year I said I had used up every article made available to me, in fact I think I said I had "scraped the barrel clean", and I urged you all to be ready to recount your incidents and adventures in the form of articles for the first issue in September. This year, I'm using a different tactic, more by force of circumstance than by good management, but it happens that I have an article or two in stock, ready to kick off Volume 22. I'm glad things have worked out the way they have, because last fall, with the shelf bare, it was quite a struggle to make up the first issue or two.

But I'm sure you won't let me down when it comes to making up Issue Number One of Volume Twenty-two. As a

matter of fact, it might be better if you don't wait until August or early September to send in your submissions - send them in as they occur to you, well ahead of time.

One of the biggest problems I have is to find stories that "fit" the space available without having to split an article and continue it in the next issue. If I have a good stock of material on hand, an assortment of long and short pieces, I can usually find something that does the trick nicely. In addition to that, it is nice to have a good stock of material on hand, then I can plan to some degree for the future -- then you won't get issues that are all birds, all bugs or all plants -- variety is the spice of life.

To those of you who have sent in an article or articles, be assured your efforts were sincerely appreciated. The readers and the editors are grateful and we are pleased to say "Thank you".

And, before I close, I have another bouquet to present, one that should have been presented a long time ago. We are, I'm afraid, inclined to take for granted those who serve us well, particularly those who work behind the scenes and are neglected because they are not members of our organization. I'm thinking of those who perform the final and vital act of producing our magazine in spite of our fumbles and failures to meet deadlines - the printers. Specifically, I'm thinking of Miss Monks who has patiently, for many years, put up with the foibles of our publication. If anyone deserves our thanks and gratitude, she does. Thank you, Miss Monks, for your patience and excellent service.

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MEETINGS AND FIELD TRIPS

EXECUTIVE MEETING: Dr. Carl's Office, Provincial Museum
May 4 at 8 p.m.

BOTANY FIELD TRIP: Meet at Monterey Parking Lot at 10 A.M.
May 8 for a trip along West Saanich Rd. to
Centennial Park and Henderson's Point.
Return eastward across Saanich Peninsula.
Bring lunch.

ANNUAL GENERAL MEETING: Douglas Building Cafeteria, Elliot
May 11 Street; Shell Oil Co. film to be shown --
"Darwin and the Insects of Brazil" - 8 P.M.

BIRD FIELD TRIP: Meet at Monterey Parking Lot at 9:30 A.M.
May 15 or Bamberton Park parking lot at 10:30 A.M.
Bring lunch. Leader: Murray Matheson.

JUNIOR GROUP: Meet each Saturday at Monterey Parking
Lot at 1:30 P.M. for field trips.
Leader: Freeman King, Phone 479-2966.

SUMMER FIELD TRIPS

BOTANY: Meet at Monterey Parking lot at 9:30 A.M. for
June 5 a trip to George Pringle Memorial Camp (west
side of Shawnigan Lake) Bring lunch.

BIRDS: To East Sooke. Meet at Monterey Parking lot
June 12 at 9:30 A.M. or Colwood Plaza at 10 A.M.
Bring lunch. Leader: Murray Matheson.

BOTANY: Meet at Monterey Parking lot at 1:30 P.M. for
July 3 a trip to Goldstream Park. Bring tea.

BIRDS: Boat trip to Bare Island. Contact Mr.T.Briggs
July 17 for reservations and time. This trip must be
arranged in advance because we must guarantee
a minimum fare. Bring lunch. Leader: Mr.Briggs.

BOTANY: Meet at Monterey Parking lot at 1:30 P.M. for
August 7 a trip to John Dean Park or some alternate
area. Bring tea.

BIRDS: To Cowichan Bay. Meet at Monterey Parking lot
August 14 at 9:30 A.M. or Goldstream Picnic site
parking lot at 10 A.M. Bring lunch.
Leader: Murray Matheson.

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