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ALBERTA NATURALIST

Box 1472, Edmonton T5J 2N5 (General)

Box 308, Spruce Grove (Editor)

# NEWSLETTER

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DON'T MISS OUR MAY MEETING

To receive the Alberta Naturalist regularly, send your membership fee with enormous speed to our Treasurer at 2630-22nd. St., Lethbridge, the Athens of the South (Where's Athens ? ). Fees are $2 ( What a fantastic bargain for an ever increasing Alberta Naturalist - it can't go on like this folks ) or $10 for the affluent, wealthy, generous, appreciative, good, kind, fantastic, superb, discriminatory, eclectic, discriminating reader. If I didn't go on like this, none of you would read this bit, and would not remember to pay your subscription. If ( starting with the next issue ) you don't get yours, that will be why. So pay now, while you're in the mood.

EDITORIAL : HUNTERS AND NATURALISTS

"For years, we have been carrying these non-paying people like parasites on our back"

(Delegate at 1973 Alberta Fish and Game Association Meeting, reported in Edmonton Journal)

There has been a sad lack of liaison between different conservation groups and movements in Alberta, which cannot continue indefinitely if informed opinion is to work effectively.

The Alberta Fish and Game Association dweveloped as a means of uniting the efforts of hunters and fishermen in the province. In recent years it has been a pioneer in directing attention to some of the environmental problems of the province, notably those connected with resource management and pollution. It has shown imaginative leadership in some fields, but to the outsider at least this effort seems to have been made at the expense of a considerable lossoof support among the membership at large. The remark quoted above would not need to be taken seriously were it not typical of many AFGA comments in the press and 'Defending all Outdoors' about the non-hunter. 'Defending all Outdoors' has thus made interesting reading in recent years as an outlet for both serious and informed writing, and the most absurd and ill-informed comment.

During the last few years other outdoor interests have become organised and vocal. The National and Provincial Parks Association, the Alberta Wilderness Association and numerous outdoor, professional and pollution organisations have all had much worthwhile to say. The naturalist's movement, although active in the province continuously from 1897, has only recently developed a provincial and national organisation adequate to serve its interests. The development of these new organisations has provided many opportunities for co-operative effort, some of which have been taken, but many of which have been missed.

What is the role of the hunter and fisherman, and his organisations? How should the naturalists relate?

The hunter is primarily interested in the pursuit of game, as a source of food, and of sport. He will certainly enjoy the exposure to the outdoors his recreation brings him; he may take an interest in other aspects of the outdoor world, and in other outdoor pursuits. Some hunters are naturalists too, in the sense that they study, observe and take pleasure in the natuaral world about them. Many are very knowledgeable in the ways of at least the animals they pursue. The man who is both a hunter and a naturalist, though, seems to be nowadays a rarity - the days of Akeley and Chapman are gone. There are perhaps many who have developed a serious interest in nature through hunting, and (like Peter Scott) have put away their guns.

The hunter's primary interest, then, is the availability of game to shoot, and he is thus sensibly concerned with the preservation and improvement of game habitat, and the consequences of water pollution. He may also take a somewhat narrow view of predators, and land reserved from hunting, and promote the introduction of exotic game birds and fish to the detriment of native species. The much-touted financial contribution of the hunter thus supports a wide spectrum of activities, not all of which the naturalist can be expected to sympathise, let alone pay for.

More recently, the hunter considers himself under pressure from those who would limit the availability of guns in order to control crime. He is concerned that the rural dweller wishes to protect himself from irresponsible gun carriers ( and after a recent estimate, from the AFGA president himself, that only 10% of hunters ask permission to hunt on private land, who can be regarded as responsible?). He is worried most of all that the movement to ban hunting altogether begins to gain momentum.

The naturalist ( unless he is also a vegetarian ), probably regards the aspirations of the responsible hunter as legitimate. While populations of game animals exist in adequate numbers, there is surely room for at least the resident hunter who is prepared to make the real effort to locate his quarry, use his skill to catch or shoot it with a minimum of pain, and make good use of his bag. Equally, though, the hunter should be prepared to accept that there should be areas unhunted to provide ecological reserves, parks and natural areas ( including even magpies) can live out their lives undisturbed by controlled scientific study, compatible recreation, and the provision of educational experience for tomorrow's hunters, naturalists, legislators and everyman.

It is a pleasure to welcome the leadership of Bob Scammell, the new AFGA president, in his plans to turn "the power of (the AFGA) to the goal of ensuring that now and in the future people will be able to hunt and fish in a sportsman-like manner.....in Alberta"

FAN should look forward to developing a productive dialogue with AFGA, with co-operative action in areas of agreement, and private discussion rather than public vituperation in areas of potential conflict.

## OUR COVER ARTIST

This issue has a cover by Vivian Thierfelder, another of Alberta's new generation of Nature artists. Vivian was born in Edmonton, and educated at Queen Elizabeth High and the University of Alberta, where she took a Bachelor of Fine Arts degree. After a short period of work as an illustrator for the correspondence school branch, she joined the Provincial Museum and Archives staff, initially as a foreground assistant on the Habitat Group program. Here, many months were spent in creating artificial wild roses for the new Coyote habitat, and attaching artificial snow to branches for the winter White-tailed Deer scene, as well as doing a variety of jobs for the Moose and the planned Shorebird groups. After transfer to the Exhibit Construction Division as a Display Artist, Vivian has done design work for several different galleries, including the completed Mammal and Domestic Artefacts areas, and several exhibits in planning such as the Indian Subsistence and Technology and Conservation galleries, and exhibits out of the PMAA building to be placed in the Calgary fish hatchery and Rutherford House. During more serious work at PMAA, Vivian revealed a talent for cartoons which has been extensively used in the Conservation gallery, from which the cover illustration ( depict ing the possible / probable future extinction of Whooping Cranes) has been chosen.

As a serious artist, Vivian has begun to be well known in the Edmonton area. Her first work was exhibited before she left school, and subsequent appearances have been in the All Alberta 1969 and West 71 exhibitions at the Edmonton Art Gallery, the first Canadian Nature Art Exhibition in Ottawa in 1971, and a one-woman show at the Lefebvre Gallery in 1970. Favourite subjects include landscapes, abandoned buildings, and individual plants.

## STOP PRESS

Bow Valley made it ( see page 39 ), with details of the field program. All meetings at Bear St. parking lot, at 9 a.m. (first two) or 8 a.m. (rest). June 2 Pigeon Lookout; June 9 Exshaw; June 24 Aylmer Lookout; July 7 Rockbound Lake behind Mt. Eisenhower ( so called ); July 21-22 camp at Rampart Creek (mind the bears ) ; Aug 4 Paradise Valley via Moraine Lake; Aug 19 Bourgeau Lake. For further information contact Mike Melvor (762-4160), Aileen Harmon (762-3607), Bruce Gordon (762-3715) or Gordon Burles (762-2379)

NATURALISTS NOTEBOOK (5) Small fossil vertebrates. John E. Storer

When vertebrate paleontology, the study of the fossils of backboned animals, is mentioned, most people think immediately of the dinosaurs. This is natural, because many of the dinosaurs were very large animals, and the group dominated the land until their extinction nearly 64 million years ago.

Likewise, we think of the large mammals of the glacial age. Elephants, horses, camels, bison, and giant sloths are familiar because they were large and conspicuous. In our estimation, an animal that shook the earth when it walked was a fine animal indeed.

We know a lot about the large animals of the past, because their fossils are large and relatively easy to find. The remains of large vertebrates have been collected from thousands of places in the world, and form impressive displays in the world's museums. Enough fossils of large vertebrates are known to give us an excellent picture of the probable evolutionary trends in most groups.

But if we want to know the whole story, the information gained from small fossils is invaluable. The teeth of small mammals, and the bones of small reptiles, amphibians, birds, and fish give important data.

In some ways, the information to be gained from the study of small animals is more revealing than that gained from large ones. In nearly any given ecosystem, the small animals outnumber the large ones, in both numbers of individuals and numbers of species. Small animals utilize food sources unavailable to large animals, and themselves provide food for larger members of the community. Small animals are in general more likely to survive in situations where food is in short supply, because they require less food to stay alive. The major disadvantage to small animals is their relatively fast gain or loss of heat when they are subjected to extremes of temperature.

If the paleontologist uses the appropriate techniques, he can collect more fossils belonging to each species of small vertebrate, and more different species than if he were searching only for large animals. So we are treated to the spectacle of the paleontologist, supposedly a person of sound mind, crawling on his belly, and peering at the rock. We may doubt his sanity when he explains he is looking for tiny teeth or scraps of bone.

Or we may see a group of people putting dirt through a fine screen, carefully loading the screened material into sacks and staggering off with them to a truck. Worse yet, we may spot someone standing in a stream, washing mud through a sieve and anxiously peering at the pebbles that are left behind.

Are these people demented? It is hard to believe, but they are looking for a real scientific treasure, identifiable remains of small vertebrates. If bones and teeth are found, they may yield information about the kinds of animals that lived in a particular area at some time in the past. From this information, we may gain some idea of the structure of the animal community, and may even be able to develop ideas about the prevailing conditions under which the animals lived.

For the past several years, University of Alberta field crews have been washing and screening for small vertebrates in various Upper Cretaceous rocks, deposits representing the later part of the Age of Dinosaurs. The Provincial Museum and Archives has been screening gravels from the Hand Hills, and has taken samples from other plateau-capping gravels of the Age of Mammals. Both these operations have met with success, and our picture of Alberta's past improves with each year.

Additional reading

Russell, L.S. 1970. The great Saskatchewan mouse mine. Rotunda, 3 (1) : 16-24.

OVERHEARD (21)

..And then you have beast of severall kind
The one is black a Buffilo great
Another is an outgrown Bear wch is good meat
His skin to gett I have used all ye ways I can
He is mans food and he makes food of man
His hide they would not me it preserve
But said it was a god and they should Starve
This plain affords nothing but Beast and grass
And over it in three days time we past
Getting unto ye woods on the other side
It being about forty sixe miles wide
This wood is poplo ridges with small ponds of water
there is beavour in abundance but no Otter
.....

Fragment of Henry Kelsey's impressions of the northern plains, which he was the first European to visit in 1690

NATURALIST'S BOOKSHELF (3) D. A. E. Spalding

BASIC BOOKS ON ALBERTA'S NATURAL HISTORY

Alberta is fortunate in its natural history publications in comparison to many other provinces. The most basic books are probably these. All are obtainable from bookshops(prices current at the PMAA bookshop are listed), and should be in every public and school library in the province; most should be in the naturalist's personal library as well.

Hardy, W.G. (ed.) (1967) Alberta, A Natural History (distributed by M. G. Hurtig, Edmonton). 343 p. ($7.50).

A centennial publication, with chapters on all aspects of Alberta's natural history by leading experts. Only conservation is inadequately covered, and many major developments have taken place since the book was published. Illustrations are copious, well chosen and of high quality, and the text is very readable and informative. There is a good bibliography of basic material up to 1967. This is the basic book, which should be in the library of every Alberta naturalist for reference, reading and re-reading. (Separate copies of some chapters are obtainable at PMAA bookshop for $1.00 each).

Nelson, S.J. (1970) The Face of Time - the geological history of western Canada. Alberta Society of Petroleum Geologists. 133 p. ($25.00).

Expensive and cumbersome to handle, this is nevertheless the finest popular book on the geology of Alberta, with much information about basic principles, and splendid illustrations and maps. Perhaps too expensive to buy for any but the geology specialist, but there should be a library copy available.

Cormack, R.G.H. (1971) Wild Flowers of Alberta. Government of Alberta. 415 p. ($6.00).

An identification guide, with generally adequate, sometimes excellent colour photographs, and a reasonable, if not exciting text. Many flowers are omitted, of course, and the keen botanist will wish to graduate on to the Flora of Alberta.

Paetz, M.J. & J.S. Nelson (1970) The Fishes of Alberta. Government of Alberta. 272 p. ($6.00)

A comprehensive account of Alberta's fish by the province's leading experts. Good colour and black-and-white photographs, distribution maps, and a readable though technical text on the relatively few species make this perhaps the best of the series. Essential to the fisherman and freshwater specialist, this is also well worth acquiring by the general naturalist for its interesting account of a neglected but fascinating group of our fauna.

Salt, W.R. & A.L. Wilk (1966) The Birds of Alberta. Government of Alberta. 511 p. ($5.00).

The basic work on our most popular natural history subject, The Birds of Alberta was the first major work to be published on Alberta's natural history when it first appeared in 1958. The second edition has much improved illustrations, but the quality is still uneven, and space limitations did not allow new species and additional information to be comfortably incorporated. A recent 'third edition' is in fact only a reprint of the second, but the author is now at work on a comprehensive revision.

Soper, J.D. (1964) The Mammals of Alberta. Hamly Press. 410 p. ($5.00)

A very comprehensive treatment of Alberta's interesting mammal fauna, based on the author's vast experience in a lifetime of field work. Fair to excellent illustrations, and an interesting text make this invaluable to the naturalist, however, the poor distribution maps and awkward division of the text with the emphasis on subspecies make this a difficult book for use by the general public.

Braithwaite, M. (1970). The Western Plains. 160 p.

Edwards, R.Y. (1970). The Mountain Barrier. 160 p.

Moon, B. (1970). The Canadian Shield. 160 p.

Illustrated Natural History of Canada, N.S.L. Natural Science of Canada Ltd. ($6.95).

The first two volumes of this recent series cover most of the province between them, and give a useful overview of the province's natural history in relation to adjacent areas. Unfortunately the often fine photographs are accompanied by inaccurate captions and hideous graphics, so that they can only be recommended to the non-specialist user in the absence of alternatives. The Plains volume is heavily biased towards the eastern prairie provinces, and does not give very good coverage to Alberta. It is to be hoped these books will be substantially revised. The shield volume relates to the northeastern corner of the province, which is virtually inaccessible to the amateur naturalist.

OVERHEARD (22)

The Beet Webworm(Loxostege sticticalis L.) This year probably witnessed the most widespread outbreak of this insect that has ever occurred in Alberta. Of the two generations, the second, of which the larvae appear in September, usually far exceeds the first in point of numbers. During the first half of June adults were very abundant, and eggs could be found frequently on lambs-quarters (Chenopodium album L.). By the middle of July larvae of the first generation appeared in unprecedented numbers throughout the south-western portion of the province, and were recorded as far north as Edmonton. Gardens disappeared almost overnight. On July 19th. two trains on different lines running south from Calgary were stopped by migrating larva, and a few days later the city of Calgary itself was invaded to an extent that seriously annoyed and alarmed the citizens.

Alberta Dept. of Agriculture Annual Report, 1920

RECENT PUBLICATIONS ON THE NATURAL HISTORY OF ALBERTA (4)

| | | |
|---|---|---|
| Cameron, J.F. (1973) | Canadian Government announces $5,000,000 fund for Federal-Provincial Crop depredation programme. | Biological Conservation 5 (1) : 60 |
| Dekker, D. (1973) | Red Foxes make a comeback in central Alberta after 30 years. | Blue Jay 31 (1) : 43-44 |
| Goulden, L.L. (1972) | Further Raven sightings. | Edmonton Naturalist December 1972 : 6 |
| Hafstein, G.V. (1972) | Drumheller Valley. | Fossil Trails 2 (9) : 5 |
| Henderson, J.D. et al (1973) | Suffield Block. | Alberta Hansard 2 (21) : 858-860 |
| Herrero, S. (ed) (1972) | Bears - their biology and management. A selection of papers and discussion from the Second International Conference on Bear Research and Management, held at the University of Calgary, Alberta, Canada 6 to 9 November 1970. Under the sponsorship of the Environmental Sciences Centre (Kananaskis) and the University of Calgary. | IUCN Publications new series No. 23 : 7-371 |
| Horesji, B. (1973) | The Life of the Rocky Mountain Bighorn. | Dinny's Digest 2 (3) : 4-13 |
| Johnson, R. (1973) | Mountain Bluebirds. | "Defending All Outdoors" 7 (2) : 13 |
| Kondla, N.G. (1973) | Nesting of the Black Swift at Johnston's Canyon, Alberta. | Canadian Field-Naturalist 87 : 64-65 |
| Lougheed, P. (1973) | Ministerial Announcements. (Natural Gas at Suffield) | Alberta Hansard 2 (20) : 831-832 |
| Nelson, J.G. (1973) | Canada's National Parks: past, present, and future. | Canadian Geographical Journal 86 (3) : 68-89 |
| Norbeck, C. & B. Edwards (1973) | Prairie Wilderness on the South Saskatchewan. | Nature Canada 2 (1) : 27-30 |

( Selected references from PMAA bibliography of Alberta Natural history D.A.E.S. 14.5.73)

CONSERVATION COMMENT (4) FAN BRIEF TO ECA ON SULPHUR HEARINGS

The Federation of Alberta Naturalists recognizes that large quantities of sulphur are contained in the natural gas reserves of Alberta; that ways must be found to extract this sulphur to clean the gas and for the marketing of pure sulphur or of sulphur compounds; that the Petroleum Gas Industry in Alberta has been making serious attempts to reduce environmental pollution; and that the Government of the Province has gradually been tightening regulations to ensure that pollution is kept to a minimum.

The Federation also recognizes that serious environmental damage results from air and water pollution by sulphur and sulphur compounds escaping in various forms from Gas Extraction Plants. It feels that numerous instances of damage have been well documented and that the Provincial Government, the Industry, and the public, has learned from these experiences and that conditions continue to improve. The Federation is particularly concerned, however, in regard to a number of subjects, especially as there appears to be a trend for the development of more and larger extraction facilities.

Firstly, we believe that industry and government do not know nearly enough about the effects of sulphur pollution on plants, animals, and on inanimate objects. We urge that the Provincial Government encourage further research in this area. We need to know exactly what happens, so that sensible legal and precautionary limits can be established.

Secondly, we feel that the monitoring of the amount of air and water pollution has been too superficial in the past. We know that monitoring systems utilizing chemical devices and biological indicators can be set up reasonably inexpensively. We feel that such systems should be put into operation in association with most of the already existing plants. We also urge that tree-dwelling lichens be used as biological indicators whenever

possible. Their use in Alberta has been very spotty to date, and at the present we are aware of their use only in connection with the Ram River development by Aquitaine [cf. Oil Week 23(29):22]. Lichens not only act as indicators of the amount of pollution but also indicate its extent. Publications by F. LeBlanc and others describe the principles involved with the use of lichens as biological monitors and outline methods of application. These should be required reading for all researchers, planners, and legislators. A list of 21 pertinent references is attached.

Thirdly, we urge that the Provincial Government encourage research into the discovery of practical methods whereby environmental pollution from Sulphur Extraction Plants can be kept to a minimum. This should involve study in two directions: (1) to find "tighter" methods of processing so that smaller amounts of sulphur compounds are given off as waste, and (2) to come up with better methods, such as electrostatic precipitators, by which to remove gaseous, solid, and liquid effluents.

Fourthly, we urge that the Provincial Government carry out a more thorough policing of the regulations which are now in effect. Most operators are dependable and conscientious but, as in all spheres of life, society must be protected from carelessness and from a small minority of amoral individuals.

OVERHEARD (23)

There are no words that can describe the Montebello experience of meeting and working with Canadians from all walks of life and from all parts of the nation. To meet and understand the dedication, concerned awareness and excellence of the delegates was truly a dramatic experience.....

Unfortunately, a by-product of the Montebello workshop was the introduction of 1½ million gallons of raw untreated sewage into the beautiful Ottawa river.

Dennis Wighton reporting on the Man and Resources workshop in Environment News, Feb/Mar 1973

CLUB CORNER (4) MAKING THE MOST OF SPEAKERS

Speakers at winter sessions are among the most important aspects of a natural history group's program, and yet organization of a program can cause many problems. Here are some suggestions for the organizer, based on experience from both sides of the fence. These notes will be concerned with 'outside' speakers although many aspects apply equally to speakers from your own membership.

LOCATING SPEAKERS

Wherever your group is located, there will be people within reach who are able and willing to help. The first problem is to locate them.

Use contacts - Members of the executive of a group should between them know enough people to get any club off the ground.

Use the phone book - Many government and educational agencies will be listed; if you have no contacts, phone and ask for help.

Use existing services - Some Universities, Colleges, Government and Municipal Departments offer talks to interested groups as part of their educational program. Do not hesitate to use their services. Some citizen's groups in related areas may also provide speakers as part of their own programs, and may be interested in an exchange.

Check your neighbouring clubs - Be in touch with neighbouring groups - they should be able to recommend good speakers to you. FAN directors and officers can all make suggestions.

Do not hesitate to approach out-of-town sources - Some speakers may be funded by their departments for particular programs, or given adequate warning may be able to arrange a talk for your group while travelling on other business. Some organizations have regional officers who may be available. You should let out of town speakers know whether you can afford to pay expenses when making the initial approach.

Some Specific Suggestions

Local teachers, college and university lecturers.

Camera, archeological, horticultural, hunting and pollution groups.

Neighbouring natural history clubs, park and conservation organizations.

Provincial Government departments of Environment, Lands and Forests (Fish & Wildlife, Parks, Forestry), Agriculture, Culture, Youth and Recreation (Outdoor Education and Provincial Museum).

Federal Government departments including Environment (Canadian Wildlife Service, Canadian Forestry Service) and Agriculture (Laboratories), Indian and Northern Affairs (National Parks).

Industry - oil companies, consultants, etc.

SELECTING SPEAKERS

Having located potential speakers, it is important to be selective for your immediate program. A University-level talk on insect physiology is not the best thing for your junior members, and an elementary birds-in-your-garden approach would not be of much use to a sophisticated bird banding and research group. Try and match the subject and approach to the interests of your club members, who should be involved in planning your program.

Find out before approaching them whether they are likely to be good - high qualifications or an interest in the field do not necessarily make a good speaker. Before making a direct approach try and find someone who has heard the speaker before. But equally, don't hesitate to take an occasional risk - speakers are not always consistent, and an unknown speaker may be electrifying.

MAKING ARRANGEMENTS

It is important that one person in the club has clear responsibility for making arrangements. In a small group, it may be the president or secretary; in a larger one there may be a special meeting's or program secretary. Approaches may be made through a friend of the speaker on the executive, but someone must co-ordinate the program.

Before making a specific approach, be prepared to say when you want the speaker (give a choice of dates), where the meeting will be held, what sort of facilities are available, how large and how knowledgeable the audience is likely to be, and what you want to hear about. If you give the speaker a choice of topic, give guidance on a selection that will interest your group.

If he agrees, give him time to think about content of the talk, and then go back for a title in good time for advertising. If he has not got a good title, be prepared to suggest one (it greatly simplifies advertising). Don't select and publicize a title the speaker has not approved. If no one in your group has the details, ask for some personal background and a brief indication of the topic for your newsletter. Send the speaker a copy of the newsletter or announcement advertising his talk.

A few days before the talk, it is courteous to remind the speaker, and check what facilities are needed. He may bring his own projector, but the club should be prepared to provide projector and screen, blackboard, pinboard and table space if needed.

ON THE NIGHT

If your speaker is local, and knows the hall, it would be quite acceptable to meet him there; early enough to give some help in setting up the projector, moving tables, pinning up pictures, or whatever is needed. Have chalk, thumb-tacks, and a spare bulb for the projector available, and know how to find the janitor if help is needed.

If the speaker is from out of town, clear directions will be appreciated if travelling by road, or being met if travelling by train or plane.

An out of town speaker may appreciate a meal before the talk (check beforehand), and if no expenses are being paid, someone in the club should offer hospitality for the night if necessary. If expenses are being paid by the club or the speaker's employer, advice on where to stay and an invitation for coffee afterwards may still be appreciated.

Before the talk, have enough business to get late-comers settled, but don't go on for an hour about organizational trivia. Have someone (President, Chairman, Meeting Secretary, or contact person) available to introduce the speaker. It need not be a big build-up, but should state briefly and succinctly who the speaker is, what he does, where he comes from and why he is here. Some people introducing the speaker are stirred to reminiscence by the title, and may steal highlights from the speaker - introduction for even the most eminent speaker should be under five minutes.

Afterwards, allow questions if time is available, but not so many as to exhaust the speaker who may have travelled a long way to reach you. Brief thanks from the chairman or one of the audience are usually adequate to conclude the presentation. If coffee is served after the talk, make sure the speaker gets a cup - he may well be surrounded by his audience asking further questions, and be unable to break away without appearing rude.

SHOWING APPRECIATION

A speaker will be more ready to come back another time if arrangements have been made smoothly and he feels his efforts are aporeciated. To a large extent, the interest shown by the audience will be his reward, and that will be a result of careful matching of speaker to group in the initial planning. A letter of thanks subsequently is a nice gesture, although not essential.

Some clubs give a token of appreciation to the speaker - a free membership for a year, or an original drawing by a member of the club. These are not essential, but are a nice bonus, and leave the speaker feeling that his efforts have really been appreciated.

D. A. E. Spalding. 8.3.73

ALBERTA NATURALIST (8) Charles B. Horsbrugh

Charles Horsbrugh made two useful contributions to the study of Alberta's birds at the time of the First World War, but relatively little biographical information has so far come to light. The following summary is mainly gleaned from comments in his two papers, and it has not so far been possible to trace an obituary notice or other independent biographical information.

It is likely that Horsbrugh was born and educated in England. He uses English names for a number of species (Great Northern Diver for loon) compares to english species (European Buzzard), and refers to bird observations made in Norway with Bowdler Sharpe, who was an ornighologist on the staff of the British Museum.

An overland trip from Halifax is referred to, presumably not long before 1914. He does not give precise information about his residence, but this was presumably in Alix. His bird classification is based on the AOU list, but he does not appear to have been a member of the AOU.

While in Alix, he clearly spent much time bird watching; later evidence suggests that he was a doctor. He made trips to Edmonton and Calgary and about the immediate area, and refers to friends George Cook and James Brindle, the former of Buffalo Lake. He also mentions his wife, who clearly shared his interests, at least as far as rearing young birds went. (Franklin's Gulls, Horned and other owls, Sapsuckers, which ended in zoos in Banff and Vancouver).

In October 1915 he moved to Red Deer and became active in the Alberta Natural History Society, and was Secretary-Treasurer for 1916. At this time his interests were not confined to birds, as the ANHS annual report for 1916 includes his observation of a bettle attacking caterpillars.

Shortly after this he joined the Canadian Army Medical Corps of the British Expeditionary Force, and served for at least two years. No subsequent information has come to light, but presumably Horsbrugh did not return to Canada. Perhaps he was one of the many losses in the 'Great War', or perhaps he survived but stayed in England. Any additional information would be welcome.

D.A.E.Spalding, 14.5.73

OVERHEARD(25)

Alligators may be stimulated to roar by the roaring of other males, by thunder, by blasting, and by gunfire, or ..... by the sound of B flat two octaves below middle G ... on a French Horn.

Oliver, Natural History of North American Amphibians and Reptiles, p.213

## GUIDELINES FOR USE OF NATURAL AREAS IN CITY PARKS

It has been said that "the fate of our natural world doesn't rest in politicians and legislations nearly so much as in each individual".

The following guidelines are intended to aid in responsible utilization of the resources available in your City Parks.

The plants, animals and other natural objects are for all to enjoy in place. Please refrain from collecting.

Be careful not to disturb animal life on land, in the air, or in the water. Every animal, a worm, bug, bird, or mammal has an important role in the scheme of nature.

Eggs and young are to be left alone; removal is an offence under the law.

Parkland trails are for your use, please stay on them. Trampling and packing with foot traffic off the trail will kill the small plants. Human erosion can be prevented only by humans.

When exploring, replace all logs and stones turned over for investigation. They serve as cover for the small insect and other invertebrate life which cannot survive exposure.

Tens of thousands of dollars are spent each year to keep parks free from trash. Put your refuse in containers which are provided.

Boxes and rings are provided for open fires, wood is supplied. Leave the natural dead wood for plants and animals to utilize.

Practice axemanship in the woodpile. Bring your own weiner sticks. Cutting and damaging of trees is not permitted (a by-law).

Active game areas and facilities are provided in open fields. The natural areas cannot stand the pressure of constant trampling and compacting.

Use of motor vehicles, mini-bikes, motorcycles and snowmobiles is prohibited at any time on park trails by by-law. Permitted areas for snowmobiles are designated by the Superintendent from time to time and are marked for the periods they may be used. No provision is made for other motorized vehicles.

Organized groups planning an outing in a City Park must register in advance with Edmonton Parks and Recreation, 10th Floor, C.N. Tower.

Responsible use and management of natural areas in your Parks increases the benefits you may enjoy now, and in the future. Help to conserve our NATURAL HERITAGE.

A.V. Pettigrew,
Acting Superintendent,
EDMONTON PARKS & RECREATION.

BIRDS OF BUFFALO LAKE (1914-1916) C. B. Horsbrugh

(Summarized from papers in the Ibis 1915 and 1918 by D.A.E.S.: names and sequence changed in current usage; only species with specific Buffalo Lake records included, thus some common birds not mentioned).

Common Loon - Very rare (2 records, June).
Red-necked Grebe - rare.
Western Grebe - 32 pairs, nesting end of June.
Pied-billed Grebe - Nested, June 2.
American Bittern - 2 nests, June 5 & 6.
Canada Goose - Pair June 3. Nested 1912.
Lesser Snow Goose - Sept. 26, Oct. 8.
Mallard - Commonest species.
Gadwall - May, breeding June 5.
Pintail - Nest May 24.
American Widgeon - 9 eggs May 3.
Shoveller - Eggs June 8.
Redhead - 16 eggs (some Canvasback) in one nest June 5.
Greater Scaup - Hundreds (presumably error for Lesser).
American Goldeneye - in numbers in June.
White-winged Scoter - Many hundreds, June 1. None August 15.
Ruddy Duck - Several pairs, June; more abundant in 1915.
Swainson's Hawk - Specimen May 24, August 16.
Bald Eagle - Nested 1908. Specimen Sept. 28.
Sparrow Hawk - Nest with 4 young, June 20.
Greater Prairie Chicken - One shot 14 December 1914.
Sora - Nests, 3, 9 and 13 eggs, 1-9 June.
American Coot - Commonest bird on lake, many nests, average 10 eggs. Largest clutch 13, all stages of incubation June 1.
Killdeer - 2-3 pairs, June. Nests and well-grown young early June.
Golden Plover - 2 specimens October 11.
Common Snipe - Plentiful.
Long-billed Curlew - Pair May 25.
Willet - Small numbers, 2 pairs 25 May.
Greater Yellowlegs - Occasional.
Lesser Yellowlegs - August 15.
Least Sandpiper - 6, August 15.
Dowitcher sp. - Collected August 22.
American Avocet - Single bird June 3, nest 24 May (8 eggs).
Wilson's Phalarope - Pair June 3, single bird 1916.
Herring Gull - Informed used to nest on islands. Pair May 24, June 2 & 7. (probably other large gulls, not otherwise listed).
Franklin's Gull - Thousands June & July, migrate south late September.
Black Tern - Nests, June 2, hundreds roost in reeds.
Mourning Dove - Very rare, specimen November 9.
Great Horned Owl - Young May 16.
Long-eared Owl - Nest with 4 young, May 29.
Short-eared Owl - Nestswith 5 eggs, June 5, 4 eggs June 9. Well fledged young May 3.

Yellow-shafted Flicker - Nest with 7 eggs, June 4.
Western Kingbird - First migrant reported May 22.
Least Flycatcher - Earliest record May 22.
Tree Swallow - Nesting in coffee pots!, one in stump June 3.
Bank Swallows - First arrived May 8, May 22.
Common Crow - March 27.
Long-billed Marsh Wren - Numerous nests.
Robin - None.
Bohemian Waxwing - 7 on February 16.
Myrtle Warbler - 1, May 15.
House Sparrow - None.
Western Meadowlark - 5, April 16.
Yellow-headed Blackbird - Nests commonly, eggs from June 2.
Red-winged Blackbird - Male 5 January, 1915 (?).
Baltimore Oriole - Gathering nesting materials June 4.
Common Grackle - Fair numbers, nests June 2, eggs June 6 & 10.
Rose-breasted Grosbeak - Pair June 6, few breed.
Savannah Sparrow - Fairly common, 4 eggs June 3.
Slate-colored Junco - 1, April 16.

OVERHEARD (26)

Before we are citizens in a representative democracy and before we are beings capable of accepting nature we are 'nature' ourselves, and are participants in the natural world.

Mark Terry, Teaching for Survival, a Handbook for Environmental Education. 1971 213pp Ballantine, $1.25

and 27

..The first law of intelligent tinkering is to save all the parts, the second law .... is to get all the parts working together....for..... when we make a change in nature we change our nature as well.

Noel McInnis, You are an environment, Teaching /Learning Environmental attitudes 1972. 95pp. Center for Curriculum Design, Box 350, Evanston, Illinois, $ 2.00

Both suggested by Joy Finlay. Other suggested quotations are welcome for the 'Overheard' department.

FAN NEWS

Please remember, its easy to forget

to pay your suscription. A form, to cut out or copy, was included in the last issue of your Alberta Naturalist. Please, if you haven't already done so, use it. If you can't remember, send in another one, it will always do for next year. Remember, cheques can be written on anything and still be legal ( I think). So use old $20 bills, used envelopes, spare family bibles, tanned moose hides, or even your cheque book, and send your $2 or (if you feel generous, $10 ) fee to the Treasurer, at 2630-22nd. Avenue, Lethbridge-in-the-mud, promptly.

Publicity is vital

Did you get a new member with that brochure in the last AN? Why not? If you did, and need more, please write and ask for them. Well known techniques are to lend your copy of the AN to a potentially interested friend, or (now it has a pretty cover ) leave it on your office desk. Housewives, why not wave it around at coffee parties; school age members produce it at show and tell. If all else fails, use the celebrated Scotter technique, and ask all your friends and acquaintances to join. George has been doing this with Nature Canada, and has found out who all his friends are, as well as adding (by now) over 100 new members. While you are promoting, sign your victims up for Nature Canada as well.

MAY FIELD MEETING 26 & 27 May at Rochon Sands Provincial Park

Rochon Sands P.P. is on paved highway, 10 miles north of Erskine (west of Stettler). Tenting and trailer space is available in the park, and cabin rentals are also available locally. The hall in the village next to the park has been reserved for our use on the Saturday and will serve as headquarters for the field meeting. There is a small store, but you might plan to bring a supply of food with you.

The town of Stettler, 17 miles away has two hotels and three motels for those not camping. Stettler Hotel (742-2350)- single from $6,50, double $11. Royal Hotel (742-2003)- second rate, single from $4, d.$5. Stettler motel (742-2775)-s.$7, d.$9. Heartlander motel (742-3401)-s.$9, d.$11.50. Crusader Motel (742-3371), s.$9.50,d$13.

Registration starts at 1p.m. on the Saturday, and the afternoon field trip at 1.30. For Friday overnighters, there will probably be an informal field trip on the Saturday morning. It is hoped that the Park Warden will assign FAN a separate camping and trailer area so that we can all join for a picnic around 5.30 p.m., prior to an entertainment evening in the hall around 8.p.m., organised by Red Deer A.N.H.S.).Two separate field trips will be arranged Sunday morning, at 8 and 10. Both trips will allowdeparture at different times for those travelling some distance

There will be opportunities for those bringing their own boats or canoes or wishing to rent them from the boat concession to use them on various parts of the lake. Saddle Horse trail rides can also be arranged; own horse or contact Lloyd Lohr,(742-3846 or Box 1414, Stettler)

This area is of great interest and little known - lets have a good turn out. There is a bird island within half a mile of the shore, and the narrows at the south west end have a shallow area with coots, grebes, ducks, blackbirds, marsh wrens, etc. A summary of Horsbrough's bird observations are on p.33 , and a biographical note on him on p.31

HIGHLIGHTS OF DIRECTOR'S MEETING

Penny Gladstone

The Ninth Regular Meeting of the Federation of Alberta Naturalists was held in Calgary on 25 February 1973. The Chairman, John Powell, led the Directors through a formidable Agenda of business for their consideration, and by the end of the evening the notes of the new Secretary (myself) became more and more sparse as I struggled to hold on to my pen! I came away with the assurance of how worthwhile FAN is, how fantastically diverse the variety of topics concerning our environment must necessarily be, and how efficiently a representative body can direct our concerns to the right people. Here are a few notes from the Meeting:-

C.D. Bird, FAN's Representative of the Environment Conservation Authority, explained that Directors with concerns of dangers of the environment should contact him, and that he would present these concerns to the appropriate committee. Dr. Frank Harper mentioned that Study Groups should deal with urgent matters, and that ECA must be allowed sufficient time to make their recommendations. Briefs with detail are generally the most valuable, and all briefs are very carefully studied and then published. Meanwhile, ECA is working on a form of legislation for natural areas, and the East Slope Hearings.

D.A.E. Spalding, Regional Vice-President of the Canadian Nature Federation, spoke of the need for an increase in membership, and that news items for the journal "Nature Canada" would be welcomed. He suggested clubs should arrange evenings to promote CNF, and mentioned discount for book purchases

Aileen Harmon reported that the Kananaskis Action Group were considering taking legal action in an attempt to stop the proposed highway with a design speed of 70 m.p.h. The group would recommend a highway more sensitive to the surrounding country, similar to the Banff-Jasper highway.

Dr. Len Hills, Editor of the Alberta Conservationist, spoke of the possibility of FAN supporting the publishing of a joint magazine with the Alberta Conservationist. However, after discussion it was felt that this was not a suitable time for a change of such importance, and a motion in favour of the Publicity Committee backing the Alberta Conservationist, and that FAN should withdraw its current offer to the Alberta Conservationist was carried.

Resolutions passed at this meeting included one that the Federation commends the action of the Government of Canada to enforce a moratorium on commercial whaling. Resolutions to the Government of Alberta covered subjects concerning defoliants on rights-of-way; environmental studies on proposed roads; tax concessions to encourage the use of some agricultural land to provide shelter and food for wildlife; the crossing of streams of heavy vehicles by direct routes; and humane animal traps. Many policies on varied subjects were also discussed leading to much important work ahead.

Dr. W.Ray Salt was proposed as an Honorary Director and has since accepted. The Buffalo Lake Naturalists are the new club started in Stettler in November 1972, and their two observers were particularly welcome at this meeting, as the Federation considers the participation of new clubs to be one of its principal aims. They have kindly offered to hold the next meeting at Buffalo Lake Provincial Park on 26 and 27 May.

FAN PROJECTS

A PROVINCIAL BIRD (7) by John Powell

The Buffalo Lake have now made their input, but nothing has been received from Rocky Mountain House. Only seven species were nominated; Meadowlark, Robin, Chickadee, Blue Jay, Martin, Bluebird, and Horned Owl. Added into our previous results this makes seven clear nominations for the 'top ten'. These are:

Mountain Bluebird (6)
Red-winged Blackbird (5)
Black-capped Chickadee (5)
Western Meadowlark (4)
Great Horned Owl (4)
Prairie Falcon (3)
Black-billed Magpie (3)

The remaining three will be chosen from the American Avocet, Snow Bunting, Killdeer, Bohemian and Cedar Waxwings, Pileated Woodpecker, Sparrow-hawk and Gray Jay.

STOP PRESS - Four suggestions from the Rocky Mountain House Bird Club are just in time to be included - Gray Jay, Hermit Thrush, Loon and Mountain Bluebird. This lifts the Bluebird into the clear favourite, and ensures inclusion of the Gray Jay in the short list. The other two have not been nominated before, and thus remain in limbo with only one vote

## CLUB NEWS

### Alberta Natural History Society

Several new ventures are appearing in the oldest Alberta club. A monthly newsletter was started in January - one page, with meeting notices and current news and activities.

A recent motion to change the name of the group - now considered to be rather confusing for a local group - was narrowly defeated.

An attempt has been made to interest the Provincial Government in possible purchase of a property east of Innisfail. It is a well treed quarter section at the head of Kneehill Creek.

Recent meetings have included a film program; a talk by Dave Spalding on 'The Natural History Movement in Alberta: its past, present and future' was held in march, and the april meeting will be a special showing of 'Death of a Legend', with associated displays. Meetings are now being held in the Red Deer College.

### Calgary Field Naturalist's Society

The CFNS are initiating an annual heronry census, and invite co-operation from other member clubs and individuals. The purpose of the census is simply to maintain a watch over the various heron colonies in the province and to record their expansion or decline over the years. If there are one or more heron colonies that you are familiar with and/or you would like to participate in this project please write to the address below.

The Alberta Burrowing Owl enquiry, a project which was started and met with good success last year, will also be continued this season. The purpose of this project is to determine the past and present distribution (range) of the Burrowing Owl in Alberta. If you recall seeing Burrowing Owls in your area in years past ( or if you see them this year), we would appreciate hearing from you. We are also very much in need of observation and/or cooperators from any points north of the Trans-Canada Highway (#1). Please send all comments on either project to:

Bird Study Group
Calgary Field Naturalists' Society

(Editor's Note: The above request was received from the Calgary Group - one hopes that reports on Alberta-wide projects will be published in the AN and not only delight local eyes)

### Buffalo Lake Naturalists

This new group is based on Stettler and adjacent areas, and is applying to formally join FAN. President is Lloyd Lohr, Secretary Elaine Nelson, and Vice-President Ralph Thornton. Your editor recently had the pleasure of speaking to this small but enthusiastic group. They are helping to host the meeting at Buffalo Lake.

### Edmonton Bird Club

An expanded meeting notice is beginning to carry a lot of interesting news items. Rather startling to more impecunious groups will be 'Operation Spendthrift', a team of three members whose mission is to suggest ways of spending $2500 to $3000 in surplus funds. Major criteria proposed are should be primarily of benefit to the EBC, related to birds, and should 'help to perpetuate a close-knit club' (That rules out Hawaii, anyway). Doubtless other groups in the province will have ideas, even if not within the terms of reference....

A well deserved Honorary Life Membership was presented to Reg Heath for 25 years of service, largely as treasurer. A splendid effort !

Among items awarded to the stalwart were an illuminated certificate, an engraved tankard, and suitable contents. The account does not state if Reg was also illuminated after inspecting the contents.... As well as his efforts for the EBC, Reg masterminded the financial side of the recent CNF conference in Edmonton, with enormous efficiency.

The April speaker was Professor W.Ray Salt, on the birds of Pigeon Lake as seen through the eyes of early missionary John McDougall and the speaker. Calgary has already been privileged to hear this talk, and it was a great success in Edmonton. The evening was also the occasion of the unveiling of Professor Salt's new book, and the Alberta Vireos and Warblers can now be obtained from the FMAA bookshop. (see p. 40 )

Edmonton Natural History Club

Lots of news of interest in the Edmonton Naturalist, as usual. Recent talks were by John Storer, of the FMAA, on the Cretaceous period in Alberta, and Eric Waterton, also FMAA on the effects of the natural world on native people.

The club is running a successful course on tree identification, using the services of members as instructors.

Field meetings started in march with a 17 member snowshoe / ski party in Elk Island Park. Three pages of field observations on birds, mammals and insects and a key to the conifers of the province complete the April newsletter.

The newsletter also features a smart new logo, designed by Dick Dekker.

Lethbridge Naturalists Society

A recent newsletter gives details of forthcoming April program, including a talk from Tom Willock, the Milk River photographer, and field meetings planned for Lake Newell ( May 12&13 ) and Redrock Coulee (June 17), not to mention Porcupine Hills (July 8) and Waterton ( August 12).

Your editor cannot resist quoting the Lethbridge comments on the AN .... " The latest FAN newsletter arrived today - its like good wine - improving with age. Why not note the enclosed brochure, and either send or bring it to the treasurer"/ ah, someone out there was listening, ed/ "In doing so you are benefitting yourself in two ways:

1. You are subscribing to one of the zaniest conservation publications I have ever encountered.

2. You are aiding other naturalists and conservationists in their efforts to preserve areas where life goes on the way it did before the intrusion of industry and commerce, and where there is still a place for quiet and harmony"

I couldn't have put it better myself... at least some of it.

Bow Valley Naturalists, where are you now that we need you ?

Nearly had a complete round of news, but nothing at all from Bow Valley. Not that anyone else sent anything in, except the odd (?) newsletter, but at least I had the raw material. Nearly lost out - see p. 20

OVERHEARD (24)

I suggest that the present educational system is almost totally unresponsive to the fact that we have a potential world-wide crisis literally staring us in the face

Des Berghofer
ATA Magazine, Jan-Feb 1973

## PROVINCIAL NEWS

### Ministik Hills Field Study Centre

This ambitious private venture ( see AN 3(1):17 ) has announced its summer program, and is thus Alberta's first operational field study centre which is widely available to interested people. A number of week long courses, for any student over 14, are announced, between June 23rd. and August 25th. Topics include bird study, flowering plants, general ecology, art, invertebrates, fungi, and invertebrates. Fees range from 35 - 40 dollars, for full-time students and adults respectively, for a weeks course. Full details from the Directors, Drs. Don & Lois Fenna, at 12312-39 Ave, Edmonton.

### Spruce Grove takes steps to save its Spruce Grove

The town of Spruce Grove, about eleven miles west of Edmonton on Highway 16, proudly describes itself as'the fastest growing town in the west', and for once, has statistics that may well justify the claim. As a dormitory suburb of Edmonton, it has grown very rapidly, and the population is now over 3500 and still growing.

It takes its name from a clump of muskeg down the hill from the highway, which despite encroachments from all sides still retains some attractive natural features. A recent master plan prepared for parks and recreation in the town proposes to retain virtually the whole of this area as park land, much of it in a fairly natural state, for the benefit of citizens and visitors. Although the plan has still to be adopted by town council it was received with considerable approval by an audience of about 75 citizens last month. Main discussion centred round proposals to include a public campsite in one part of the park, and a service club project to run moose in a fenced off area.

### Major study on Alberta Vireos and Warblers published.

The Provincial Museum and Archives of Alberta has just published an extensive study by Professor Ray Salt of the two families of Vireos and warblers as they occur in the province, with special reference to distribution and migration. The text includes detailed documentation of all the Alberta species. As well as distribution maps and charts, the illustrations include a specially prepared set of colour paintings of the species, by PMAA artist Ludo Bogaert, who did last issue's cover of AN. The paintings show the difficult to identify fall plumages, rather than the often illustrated spring ones. The warbler paintings are also available on a set of two wallcharts. Prices are $4.50 for the book, and $2.00 for the wallcharts. Both are available from the PMAA bookstore, at 12845 102nd. St., Edmonton. (Add 75c for handling charges if ordering by mail). Also available is Publication no. 1, an illustrated account of the work of Alberta wildlife painter Carl Rungius (1.40)

## NATIONAL NEWS

### Environment Canada

A reorganisation is announced into two main components, Fisheries and Marine services, and Environmental Services. Environmental Services includes sections for Environmental protection, management, Atmospheric environment and planning and finance. Environmental management includes national responsibilities relating to inland waters, lands, forests and wildlife, and includes such familiar bodies as Canadian Forestry and Wildlife Services, and the Canada Land Inventory personnel. New publications on pollution and environment are available free from Ottawa, K1A 0H3

B.C. hits the standard pop bottle trail again

The Federation of B.C. naturalists is reopening its 2½ year old campaign for a standard pop bottle, through an approach to the Minister of Corporate and Consumer affairs in Ottawa. Two pages of sound reasons for the stand are given, including pro lems of storage space, waste of raw materials, clean up costs and aesthetic problems, forthcoming metric plans, and others associated with the present system, with the relatively efficient beer bottle system as a contrast. One hopes B.C. have taken this up through the Consumer's Association, as the most likely national body to carry it through.

Columbia Valley Naturalists

Our nearest B.C. club keeps us informed of i ts interesting activities. Proposals for a class A park for the Mummery glacier area, ad hoc citizens parks on vacant lots, municipal waste disposal occupy one recent newsletter. CV is one of about 22 clubs in B.C. - Alberta has another 14 to go to equal them. Perhaps that warm winter has something to do with it.

Selkirk College provides educational opportunities

Selkirk College, at Castlegar, B.C., has put out an interesting brochure of summer courses. These include natural history courses on mammals, geology and scenery, field botany, bird study, insects, alpine ecology, and forest development, as well as folk music and Doukhobor folklife subjects. Courses run through July and August, fees are of the 15 - 30 level ( accomodation at weekly rates in adjacent motels). Write for details to Selkirk College, Box 1200, Castlegar, B.C.

LETTERS TO THE EDITOR

(This request for information was passed on by the Edmonton Bird Club)
Dear Mrs. Young,

I am writing to find out some information on badger watchers in the Edmonton area. I am a member of the Ottawa Field-Naturalists' Club and obtained your address from the Canadian Field-Naturalist. ...

I come from England and did quite a lot of badger watching and am very anxious to see a Canadian Badger. I understand there are quite a few in Western Canada, and as we are coming out in June for a holiday, I thought I would try and find out their whereabouts.

Yours sincerely,

Ann Lambert

Ed: Does anyone practice the quaint old English sport of badger watching? Any information can be sent to me to be passed on to our intending visitor. I have only seen one in the Edmonton area, but have not tried any serious watching since leaving England. Somehow it doesn't seem quite the same when it doesn't rain.

The following letter was from a Kansas member, and is published because it raises some general points that other members may wish to comment on. The material mentioned is not included because it would not easily reproduce or because it is largely U.S. in content, and therefore not relevant to ALL readers except as an example.

K.W. Richards
THE UNIVERSITY OF KANSAS · LAWRENCE, KANSAS · 66
DEPARTMENT OF ENTOMOLOGY · SNOW ENTOMOLOGICAL MUSEUM

March 5, 1973

Mr. David A.E. Spalding, Editor
Federation of Alberta Naturalists
Box 308, Spruce Grove, Alberta

Dear Sir:

Being a native Albertan I read with interest the FAN newsletter each time it is published. Being an independent member without affiliation to any provincial club I thought I might make my feelings known to you and also offer some assistance.

I have become a little concerned over the past little while that the newsletter is more and more becoming a natural history type newletter and not getting at the real issues. I would very much like to see some statements urging the gemeral membership to write letters on subjects inwhich there is some sort of environmental degredation. Enclosed is such a brief paper which I hand out at each of the local Sierra Club meetings in the hope to involve more people in conservation issues.

I realize that FAN presents briefs at hearings on behalf of the whole province, but would it not be better to have each group to present their own brief!! This certainly would be much more forceful and would show provincial wide support. Again getting more people envolved and developing a better environmental consciousness. is part of the overall problem and this may be part of a solution.

Has FAN ever considered sueing the provincial govt. on behalf of the environment? We do not want a Kananaskis highway so why not get a court injunction stopping such an outlandish and environmental degrading project. The govt. can not ignore a court order. Various groups have had success in this manner in the past in the USA, so why not Canada? The Western Canada chapter of the Sierra Club may be able to go jointly with you on some of these issues in court.

Also enclosed is a list of addresses of a group of concerned National and International WildLife people. This can be reproduced in the FAN newsletter providing credits are given to the Sierra Club Bay Chapter Wildlife Sub-Commettee.

I write to you not knowing whom else in the province to write to and hope that you will pass my feelings along to others when the need arises.

Sincerely
Ken Richards

RESEARCH PROJECTS

## CANADIAN NATIVE ORCHID LOCATION SURVEY (1)

John M.Powell

This survey was begun in 1966 by members of the Ottawa Field-Naturalists' Club, but early in 1967 a decision was made to make the project a national one. At the latest count data has been received from 67 different observers and the total records exceed 7,500, however, only two participants from Alberta have submitted records.

The aim of the project is to accumulate records of the exact locations of plants and colonies of native orchids in Canada, and to prepare and publish listings of the locations in readily useable form. The records will be of great value to scientists, students and conservationists, and enable amateur naturalists to make personal contributions of lasting scientific merit. To minimize the possibility of vandalism, distribution of reports giving exact locations of orchids is restricted to active participants in the project and to certain herbaria. The Project Co-ordinator is Mr. Hue MacKenzie, 228 Royal Ave., Ottawa, Ontario K2A 1T7, to whom reports are sent once a year. Should any members wish to participate in this Native Orchid Survey they could either write to Mr. MacKenzie or contact myself for further information on the method and form of reporting. I hope several of you will consider taking part in this survey as we require greatly improved coverage in Alberta. A challenge - the survey at present has no records of Epipactis gigantea, the stream orchis or giant helleborine, believed to occur in southwestern Alberta, and known from several points in British Columbia including Howser Lake and Fairmont Hot Springs.

## BREEDING BIRD SURVEY (2)

Jack Park

The breeding bird survey in 1972 was increased by 10 routes this year, thanks to willing observers who have willingly taken part. The number of routes surveyed represent the number of capable and willing observers in Alberta. This year (1972) totalled 27 routes compared to 17 in 1971, and all the prairie area was covered except for 3 routes which were not completed due to adverse weather. 149 species of birds were recorded in the combined surveys out of approximately 216 species that are commonly known to nest during June in Alberta. A total of 19,174 individuals were counted in 1972.

Work in the area above 54 latitude had its beginnings for 1973. A form letter was sent to the editors of several newspapers in northern Alberta, and has met with unexpected success. I have 8 routes lined up for this summer, and am pleased to have made contact with so many enthusiastic birders in these areas. The mountain routes have also been taken with great enthusiasm - 5 out of 8 - leaving three routes available in the southwest corner of the province. Information from the mountain routes will be combined with the British Columbia summaries of mountain areas.

The reports of the 1972 routes have been most interesting and I hope the readers may get a view of what has resulted in the running of these routes.

Of the 30 routes taken, 27 were run ( with difficulty for some observers due to weather), and three routes were not run for varying reasons. One route was run late in July, and as a result the data from this one survey were reclassed into a special category. I have received a computer punched summary from Patuxent, Maryland, on the 26 routes and the following information has been forthcoming from this report.

Probably the most interesting information from the computer report are the least observed species seen in Alberta. The following are the species seen on two or less routes.

| No. of routes | No. seen | Species | Location |
|---|---|---|---|
| 2 | 5 | Black-cr. Night Heron | 2 Brooks, 2 Czar |
| 1 | 2 | Ring-necked Duck | Keoma |
| 2 | 3 | Goldeneye | 2 Kehiwin L.1 Watino |
| 2 | 12 | White-winged Scoter | 4 Brooks, 8Lindbrook |
| 1 | 2 | Common Merganser | Eagle Hill |
| 2 | 2 | Goshawk | Eagle Hill, Warburg |
| 2 | 3 | Cooper's Hawk | 2 Halkirk, 1 Athabaska |
| 1 | 1 | Broad-winged Hawk | Mayerthorpe |
| 1 | 1 | Prairie Falcon | Talbot |
| 1 | 1 | Sharp-tailed Grouse | Raven |
| 1 | 2 | Greater Yellowlegs | Derwent |
| 1 | 1 | Bonaparte's Gull | Kinikinik |
| 1 | 1 | Belted Kingfisher | Kehiwin Lake |
| 1 | 2 | Hairy Woodpecker | Eagle Hill |
| 1 | 1 | Great Crested Flycatcher | Two Hills |
| 1 | 1 | Say's Phoebe | Bindloss |
| 1 | 2 | Gray Jay | Thunder Lake |
| 1 | 1 | Red-breasted Nuthatch | Eagle Hill |
| 2 | 3 | Long-billed Marsh Wren | 1 Brooks, 2 Derwent |
| 1 | 1 | Short-billed Marsh Wren | Kehiwin Lake |
| 1 | 1 | Mockingbird | Thunder Lake |
| 1 | 2 | Orange-crowned Warbler | Czar |
| 2 | 2 | Myrtle Warbler | Mayerthorpe, Watino |
| 2 | 5 | Connecticut Warbler | 1Two Hills, 4 Thunder L. |
| 1 | 1 | American Redstart | Mayerthorpe |
| 1 | 1 | Rusty Blackbird | Cereal |
| 1 | 2 | Evening Grosbeaks | Derwent |
| 2 | 3 | Purple Finch | 2 Warburg, 1 Mayerthorpe. |
| 1 | 1 | Sharp-tailed Sparrow | Halkirk |
| 1 | 9 | Lark Sparrow | Bow City |
| 1 | 1 | Brewer's Sparrow | Eagle Hill |
| 1 | 3 | White-crowned Sparrow | Eagle Hill |

Note The route called Ronan has been replaced by Mayerthorpe in this article as Ronan is not indicated on common road maps of Alberta, and is for the convenience of those who may wish to look up the locations of the species mentioned here.

No Blue Jays were seen on the routes run in Alberta in 1972
Species seen on all routes were - Killdeer, Magpie, Red-winged Blackbird, Brewer's Blackbird.
The top twenty most numerous species :

Red-winged Blackbird (1459), Western Meadowlark (985), Common Crow (978), Starling (908), Clay-colored Sparrow (865), Franklin's Gull (838), Cliff Swallow (794), Brewer's Blackbird (667), Savannah Sparrow (602), Black-billed Magpie (582), Mallard (573), House Sparrow (482), Vesper Sparrow (446), Robin (409), Brown-headed Cowbird (368), Chestnut-collared Longspur (346), Horned Lark (308), Killdeer (239), Black Tern (238), Yellow Warbler (232).

The average time for running the Breeding Bird Survey in Alberta was 4:15 min."right-on" average according to CWS field notes which allow 4 to 4½ hours to run a survey. There were two incredibly fast times, however, 3;34 min and 3;24 min. Personally I cannot see any enjoyment in operating a vehicle at such a rate, and certainly the wear and tear on the vehicle is not worth it! The longest time was 5:11 min, due to adverse weather.