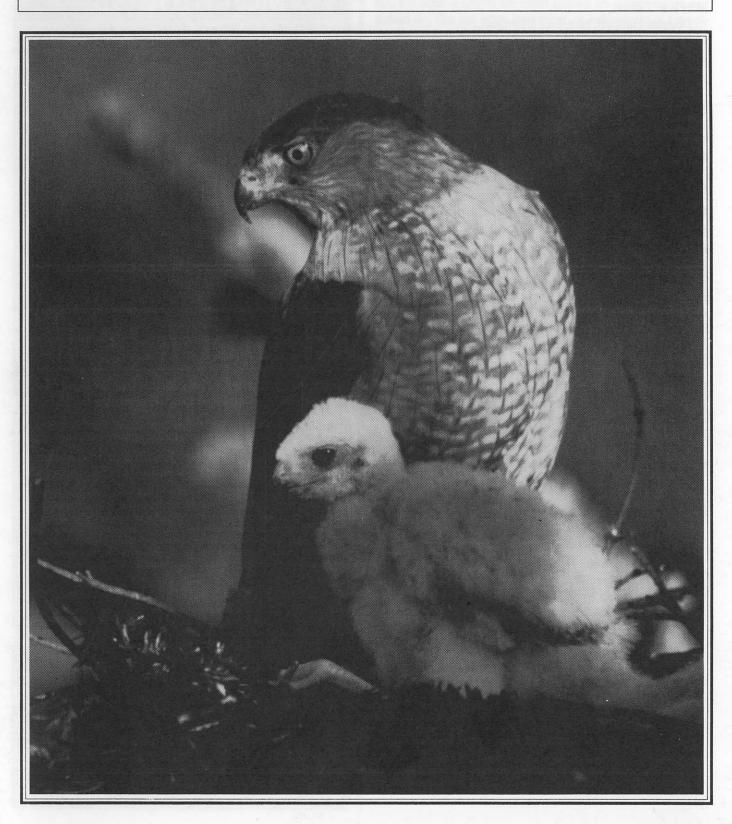
The Victoria NATURALIST

MARCH APRIL 1989

VOL. 45.5

VICTORIA NATURAL HISTORY SOCIETY





VICTORIA NATURAL HISTORY SOCIETY

Honorary Life Members

Miss E.K. Lemon, A. Douglas Turnbull, Mrs. L.E. Chambers, Mrs. Peggy Goodwill, Vic Goodwill

Officers and Directors 1989

Officers and Committees

PRESIDENT Betty Kennedy, 592-2070

VICE-PRESIDENT Dave Fraser, 479-0016, (Program)

PAST PRESIDENT Mary Richmond, 385-0504 (Swan Lk.)

TREASURER John Hunter, 479-4903 (Finance)

SECRETARY Bob Nixon, 727-6630

Directors and Committees

Robin W. Baird, 380-1925

Ed Coffin, 592-0964 (Membership)

Constance Hawley, 385-2535

Mike McGrenere, 658-8624 (Birding)

Harold Pollock, 386-4449 (Scholarships and Bird Habitat

Protection)

Rueben Ware, 385-2803

Bruce Whittington, 652-1529 (Publications Committee)

Other Functions

FBCN: W. Medd, R. Ware, R. Baird

Friends of the Provincial Museum: Mary Richmond

Librarian: A.R. Davidson, 598-3088

Birding Field Trips: A. Knowles, 477-3684

L. Davis, 477-9952

Birders Night Contact: Mike McGrenere, 658-8624

Bird Habitat: Charlie Trotter, Calver Palmateer

RARE BIRD ALERT: 592-3381 VNHS EVENT TAPE: 479-2054

The Victoria Naturalist

Managing Editor: Mark Nyhof, 595-0232

Advertising: Margaret Mackenzie-Grieve, 477-2402

Copy Editor: Jaclyn Dorsey

Distribution: Ed Coffin, Lyndis Davis

Annual Dues, including The Victoria Naturalist

and B.C. Naturalist:

Golden Age

Jan. 1 - Dec. 31, 1989

\$17.00 Regular

Family \$16.00 Sustaining

\$22.00 \$30.00

Published every two months by the

VICTORIA NATURAL HISTORY SOCIETY

P.O. Box 5220, Station B, Victoria, B.C. V8R 6N4 Contents Copyright @ 1989 as credited

ISSN 0049-612X Printed in Canada

DEADLINE FOR SUBMISSIONS:

March 31, 1989

SEND TO: John deBondt - 1001 Trailwood Pl., V8X 4J7

REPORT MARINE MAMMAL SIGHTINGS AND STRANDINGS TO:

380-1925 in the Victoria area

1-800-334-8832 toll-free anywhere in B.C.

All sightings, no matter how old, are useful for research purposes, and are put into a computer data base. Records are available to all researchers. When current local sightings of killer whales, or any unusual species, are reported promplty, researchers will try to respond to them. Please report date, time, location, a description of the animals, and number and direction of travel, as well as your name and phone number in case further information is required.

ADVERTISING ENQUIRIES are invited for display space in The Victoria Naturalist. Here is a special opportunity to reach hundreds of active outdoors people who are particular about the quality of their equipment, clothing, accessories, and recreational experiences. Our reasonable rates enable you to inform the membership about your commitment to providing superior products and services. Contact Margaret Mackenzie-Grieve at 477-2402 or Dannie Carsen at 384-4924 for details, rates, and upcoming deadlines. Submit advertising to 205-429 Linden, Victoria. V8V 4G2.

For membership information and renewal please contact Ed Coffin (592-0964) or write V.N.H.S., Box 5220, Station B. Victoria, B.C.

Opinions expressed by contributors to The Victoria Naturalist are not necessarily those of the Society.

The Victoria Naturalist Layout & Lasersetting by DESKTOP PUBLISHING LTD., Victoria, B.C.

CONTENTS

The 1988 Birding Year By Keith Taylor
Does the Diet of the Common Barn-Owl Vary Geographically in B.C.? By Sean Campbell
More on Plastics By Wilfred Medd 9
On the Art and Drama of Nature By Faye Mogensen
Canada Geese: Identifying the Subspecies By Hank Vander Pol
Growing Native By David Fraser and Terri Suttill14
Skylark-Another Little Bit of Old England By Barbara Begg
Books By A.R. Davidson
Poems By Catherine Stewart
The Life of the Mosquito By Molly Turner
Wildlife at School By A. R. Davidson
Parks and Conservation Committee Report21
New Members
Upcoming Programs

Letters

Dear Editor,

I think we as naturalists should be truly caring of our very vulnerable planet, Earth. Big concerns do need our speaking out, but equally urgent are small actions we ourselves can and should do, like not using styrofoam, as individuals or for coffee breaks at Birder's Nights and other meetings.

I checked Swan Lake and was told that at all CRD coffee breaks they use only paper cups of a type which keep hot beverages hot.

Paper products admittedly are not so ethically "right" as china/pottery cups, because paper involves death of trees, but paper does decompose in months (styrofoam, as all foam plastics, NEVER).

If we truly cherish our Earth, let us try to conserve it every way we can.

Kaye Suttill

Dear Editor:

We see an anomaly when we compare the thoughts expressed in Ms. Partridge's letter to the editor and the article written by Ms. Rushforth.

In the first instances, we should be mistrustful of taking advertising money stained in the "blood sports", but, on the other hand, it is commendable to spend monies raised by taxing the "blood sports" via the Habitat Conservation Fund!

The FBCN does have policies on these two matters, and any changes one way or the other should come from the clubs via resolutions to our Annual General Meeting.

In both instances, the writers would make a significant contribution to our Federation by volunteering to represent their club and sit on the Board of the FBCN.

> Joe Lotzkar President, Federation of B.C. Naturalists

CUBA BIRDING TRIP!

February 19-25 (other dates available) \$1104, all included, from Toronto

135 species seen, 19 of 22 endemics, great for photography

Cuban ornithologist, Canadian Group leader

call Marylee Stephenson Vancouver 253-3554

Albert R. Davidson 1888-1989

By Douglas Turnbull

On Saturday, February 4, our greatly loved and revered Davey passed away in hospital after a very long, active and productive life. He welcomed its end, so this is not a time for mourning but more for thankfulness that he has now gone to his reward. At his request there was no memorial service. This was only a few months since October 17, when he celebrated his hundredth birthday and his friends donated in his honour three benches to the Swan Lake Christmas Hill Nature Centre. Davey was predeceased by his first wife and by his son Douglas, but is survived by his wife Eleanore and a number of nieces and nephews.

The family came to Victoria in 1913, where Davey worked for some years before moving to Courtenay for a time, returning to Victoria in 1947. He joined the Victoria Natural History Society in 1948 and became the editor of The Victoria Naturalist in 1953 for a period of 10 years. In the same year he became the Society's Librarian, a job which he held until his death. In 1953, also, he started the "Tuesday Group", a group of birders who meet every Tuesday rain or shine and go birding in some likely spot. Davey led this group for many years before retiring.

For many years painting pictures was one of Davey's hobbies, his subjects being landscapes, birds, flowers and trees. His delightful pictures pleased many people, and he took part in one display by local artists.

Eleanore and Davey were married in 1960. Together they sold tickets at the Audubon films and always led a group in the Christmas bird count. Almost every day they took a picnic lunch and drove to some favourite spot to see the birds.

Davey read widely and wrote prodigiously, contributing perhaps more articles to The Naturalist than any other author. He continued writing until his death and has articles in this issue of The Naturalist.

I think of Davey as a fighter who fought valiantly for those things he believed in, mostly wildlife and their habitat. He wrote many letters to newspapers and municipalities and to the Society's Board of Directors promoting his ideas. I think he was largely responsible for stimulating the VNHS to cooperate with Saanich Municipality to save its wetlands and to make wildlife reserves at King's Pond and Quick's Bottom. His latest project was the rehabilitation of King's Pond, and perhaps we can get that done in his memory.

Jack Hutchings 1909-1989

By Douglas Turnbull

ack passed away suddenly after a heart attack on January

Long-time residents of South Africa, Jack and Greta retired to Victoria about fifteen years ago to be closer to their son and daughter and their families. Soon becoming members of the Victoria Natural History Society, they both took an active part in Society affairs and were regular attendants at the "Tuesday Group". From 1976 to 1979 Jack served as Treasurer of the Society, and his outstanding service was greatly appreciated.

Perhaps he will be best remembered as the author of delightful verses which were published in The Victoria Naturalist from time to time. He had a wonderful sense of humour and loved to poke kindly fun at people and birds and things.



A Final Message from the Editor

The March/April issue of The Victoria Naturalist is my last as editor. I say this with sadness but with a little joy as well. The task of putting out the magazine was rewarding work, but at times the workload was a bit overwhelming.

There are several people who deserve special mention for their work on The Naturalist during my time as editor.

Our production staff has been myself and Jaclyn Dorsey. Jaclyn has handled all the copy-editing duties. Her workload, at times, was huge but she never balked at any amount of work given to her. Her editing was truly first-rate and, as well, many decisions regarding the format of the magazine came from Jaclyn's suggestions.

Another person who has done a tremendous job is Margaret Mackenzie-Grieve. She has worked very hard to obtain advertising for the magazine. The money from these ads has allowed us the freedom to improve the quality and size of the magazine.

The final two members of our staff are Ed Coffin and Lyndis Davis. They have worked hard and have done a fine job to ensure that the magazines reach our members. They will continue on with the new staff.

Probably the most important part of the magazine, however, is the articles we publish. Some authors have been "regulars". They are A.R. Davidson, Keith Taylor, David Fraser and Robin Baird. Their regular articles have provided interesting reading but almost more importantly have lured others to write. Many others have written one or more articles for the magazine over the last two and a half years, and I thank you all, because the magazine is only as good as the articles within, and they have been great!

Best wishes to the new staff.

April Showcase

over the last few years the Victoria Horticultural Society has been giving us booth space in their April Showcase, where our display on wildlife and gardening has consistently proven to be one of the most popular in the show and has attracted many new people to the society. This year the show's success has prompted organizers to increase the duration of the show from a Tuesday evening to an all-day Saturday event

If you can help with setting our display up or staffing the exhibit or with some of the running around associated with getting the display material together, phone David Fraser at 479-0016.

The showcase is always fun, a great opportunity to meet a lot of interesting people and a great time to brag about your society!

Annual Dues



Do you have have an orange dot on this circle? If so, you have not paid your dues prior to the January 1. 1989 deadline and have already received two free copies of the Naturalist. To ensure that you receive the next issue of the magazine and continue your membership in the society please forward your dues immediately.

precise color processous ltd. 747 DISCOVERY ST VICTORIA, BC V8T 1H1 385-5512

Supplying Quality Photofinishing for discriminating professional and amateur photographers



New Ltd. Edition Serigraph entitled "Keepers of the Lake" by Artist Rick Beaver

The 1988 Birding Year

By Keith Taylor

As most of the globe enjoyed the warmth provided by the "Greenhouse Effect", in 1988 the Pacific Northwest had one of the coolest years of late. The first week of January was very cold, but temperatures were back to normal by the second week. Spring was a mixed bag, cooler than average (especially nights) and very wet in March through May. Recordbreaking high temperatures interrupted the cooler days that persisted into early July. Two short rain periods occurred in August and mid-September, and fall weather began in early October, beginning with a week of dense fog. Rains began soon after, flooding fields.

Duller than the weather were the birds recorded throughout the year with few excitements. No new birds were added to the Victoria Checklist. As Vic Goodwill so aptly puts it, "the year of the skunk".

The Emperor Goose found in December (1987) remained until February 2. The Palm Warbler at Esquimalt Lagoon remained until February 16, providing the first late January and February records for the Island. Another Palm Warbler was found at Jordan River on October 10 and a third on the Victoria Christmas Count at McIntyre reservoir (December 17–31). A fourth was found on December 31 at Quick's Bottom. The Long-eared Owl found at Swan Lake on January 25 (F. Mogensen-A. Scarfe) provided a first for many birders. It reacted to squeaking, coming into view in daylight until February 1. Another road-killed Long-eared Owl was turned into the museum (winter '88). For the second year, Tufted Ducks were found at the Duncan Sewage Lagoons, with one or two drakes on February 22 and one drake remaining until February 27; a female was also reported on this date.

Two Swamp Sparrows were found in January and one in April (3–7) at Quick's Bottom provided the first April records. Swamp Sparrows returned on schedule in the last week of October. Golden Eagles, Cedar Waxwings, Water Pipits and Greater White–fronted Geese sightings were in above–average numbers through the winter months. Those species dependant on seed–crops were scarce at the beginning of the year. Red Crossbills appeared in mid–April and were abundant through May. Pine Siskins were abundant by mid–April. Evening Grosbeaks appeared in good numbers at this time. All were seen in average numbers through much of the remainder of the year.

The second Anna's Hummingbird nest for Canada was discovered on February 29 by B. Gates in his yard in the Uplands. The nest contained two eggs but was unsuccessful. A second nest was found at the same location on March 12, again with two eggs. This nest was successful, and the eggs hatched on March 25–26. The young vacated the nest on April 14–15. The nest discovered at Cowichan River (July 6,

1958) has proven to have been misidentified. The first nest was discovered in July 1987 in the Cadboro Bay area.

Spring migration was very dull. The best bird was an unconfirmed Red-naped Sapsucker on April 18 at Victoria. This bird conformed to the migration period for this species. Short-billed Dowitchers seen (and heard) at Clover Point on April 11 (1) and April 12 (2) provided the earliest spring dates for this species. Blue-winged Teal normally arrive on southern Vancouver Island in the first week of May. In mid-April of 1988 unprecedented numbers occurred, with a drake on April 16 and a pair on April 17 at Courtland Flats. Two drakes were at Martindale Flats on April 20. An unconfirmed female was reported from Swan Lake before April 15.

A Vesper Sparrow was heard singing at Cobble Meadows on April 23 but could not be found subsequently. Another was found at Saltspring Island on September 29. Northern Orioles were late this year—not back until mid—May. The number of occupied nest sites were down, although a new site was discovered at Quick's Bottom. An intermediate (Baltimore—Bullock's) was reported from Somenos Lake on June 6. The fourth spring record of Nashville Warbler (May 14) was obtained when a singing male was heard and then seen at Francis Park. Many Common Goldeneyes and Black Turnstones persisted into the first week of May. Two adult Snow Geese at Courtland Flats provided the first late May records.

A very strong southeasterly storm on May 12 produced a good drop-out of passerines on May 13-15. The most spectacular effect occurred at Jordan River, with hundreds present there. High totals of Western Tanagers (16) and Western Wood-Pewees (8) were unusual for the west coast.

A Rock Wren frequenting a talus slope on Mt. Tuam, Saltspring Island, provided the first late May record (May 21–29; C. Palmateer) and the first of this species on Vancouver Island since 1977. High numbers of Wilson's Phalaropes were present as an effect of the continuing interior drought, with 9 on May 22 and 5 on June 9–14. One was still present on July 4, yet there were none of the usual August records. Reports were received from Somenos Lake, Cowichan Bay, Martindale Flats and Quick's Bottom.

The annual summer Northern Mockingbird was at Somenos Lake (May 30–June 6). An early Baird's Sandpiper (adult) was seen at Sidney Lagoon on July 10. Seldom are the earlier migrating adults seen on the east coast of Vancouver Island; the juveniles arrive in mid–July to early August. A Swainson's Hawk was seen at Blenkinsop Lake on August 10 (R. Satterfield), the first for early August. Although that sighting was unconfirmed, it is not unprecedented to see this raptor on Vancouver Island in summer months.

Shorebirding provided no surprises. Red Knots were in above–average numbers, Sidney Spit still providing them annually; there was one winter record, Rocky Point, December 31. Two Buff–breasted Sandpipers were present, one at Clover Point on August 24 and one at Sidney Spit on August 26. An unconfirmed and briefly seen immature male Ruff (R. Satterfield) was at the Victoria Golf Course on August 29.

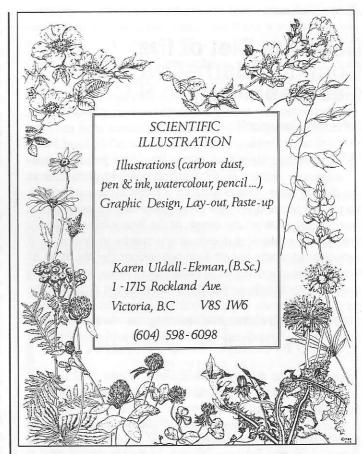
Two late dates were received of Semipalmated Sandpipers (juveniles) on September 17 and 21. Solitary Sandpipers were very scarce this year. Two Sharp-tailed Sandpipers (D. Aldcroft) were at Cowichan Bay on September 24, with one there on September 25. Lesser Golden-Plover were again monitored, with ten juvenile *dominica* recorded (September 4-27) and five juvenile *fulva* (September 14-30). One unidentified Lesser Golden-Plover flew over Swan Lake (calling) on October 5. After three years of monitoring, it is obvious that Pacific Golden-Plover represent one to every two or three American Golden-Plover in the checklist area (25-33%).

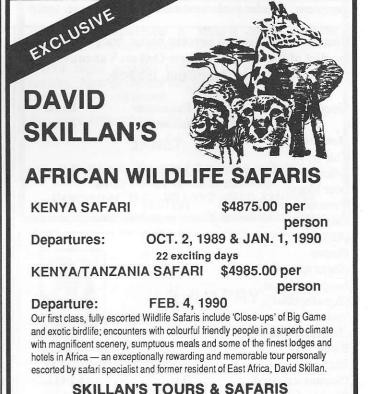
In July and August, Common Terns were in above–average numbers, with 3,000 at Oak Bay. Careful checks could not produce any Arctics. An elusive Northern Waterthrush (B. Whittington) at Goldstream Park on September 5 provided the fourth record for the checklist area and the seventh for Vancouver Island. A Wagtail species (either immature White or Black–backed) was seen briefly at Jordan River on September 11 (K. Taylor), providing the second unconfirmed and specifically unidentified Wagtail for Vancouver Island. The first was seen at Whiffen Spit, Sooke, on May 19, 1980 (R. Satterfield).

An early immature Northern Shrike was seen at Cowichan Bay on September 25 and above-average numbers of Snow Geese appeared in October, with flocks of 28 and 30-40. The above-average rainfall in early November soon flooded fields, bringing Trumpeter Swans and numerous dabbling ducks. Storm fronts brought high winds periodically through the month. Pelagic birding from the Coho was average, with Northern Fulmars (10), Fork-tailed Storm-Petrels (1), Sooty Shearwaters (5-8) and Red Phalaropes (18) encountered on November 6 and 27. A Leach's Storm-Petrel on November 27 was the latest record for the checklist area of a live bird. For the third year in a row a Clark's Grebe was found in the French Beach area, and one was at Point No Point on November 6 (D. Fraser). As there is still only one confirmed record of this species, observers should hotline sightings immediately for confirmation. Overlap in features between this and Western Grebes (and hybrids) makes identification difficult. Bill colour is the only diagnostic feature!

This year excitement reigned at Martindale Flats when a Common Grackle (second southern Vancouver Island record) was found by H. Van Der Pol on November 11–23. The sighting produced the "Patagonia Picnic—Table Effect" when both Yellow—headed and Rusty Blackbirds and a bird tentatively identified at long range as a Bobolink (K. Taylor, D. Weston, B. Gates) were found on November 12. A Pine Grosbeak (December 31) at East Sooke Park provided the first record for southern Vancouver Island after 1984 (Tod and Denise Manning, Sharon Hartwell).

December was very mild with a few cold days (especially nights) in the fourth week. An Emperor Goose (adult) arrived to the day with last year's bird (first-winter adult) on December 13-31 (I. Robinson) at Sooke. The very mild daylight hours of the Victoria Christmas Count tied last year's recordbreaking 145 species.





TEL: (604) 879-9377

"The Finest Tours & Safaris"

181, WEST BROADWAY

VANCOUVER, B.C.

Does the Diet of the Common Barn-Owl Vary Geographically in B.C.?

By Sean Campbell

The Common Barn-Owl (*Tyto alba*) is a resident, non-migratory species in British Columbia which occurs in two distinct areas. One population is found along southeastern Vancouver Island from Victoria to Courtenay, the other on the lower Mainland from the mouth of the Fraser River to Hope. This situation provides a unique opportunity to determine if geographical separation of these populations (by the Strait of Georgia) has any effect on the owl's diet. Since the barn-owl feeds almost entirely on small rodents (Bunn et al. 1982), the prey base between areas would be somewhat comparable, since these small mammals do not migrate. At the beginning of my study, I predicted that the diets would vary between areas.

I determined the diet by pellet analysis. From 1982 through 1986 I collected pellets coughed up by barn-owls in silos and barns on Vancouver Island (mostly Duncan, Chemainus and Nanaimo) and the Lower Mainland (mostly Delta, Harrison and Chilliwack). Pellets were then soaked in warm water and pulled apart. The only prey remains saved were skulls. These were then identified by comparing them to known museum specimens. Species totals were recorded.

Number of skulls and percent occurrence of prey in the diet of the Common Barn-Owl on Vancouver Island and the Lower Mainland, 1982-86.

Species	Vancouver Island	Lower Mainland
Mammals		
Vole		
(Microtus townsendii)	269 (62%)	562 (78%)
Deer Mouse		
(Peromyscus maniculatus)	78 (18%)	14 (2%)
Rats		
(Rattus species)	57 (13%)	22 (3%)
Shrews		
(Sorex species)	30 (7%)	72 (10%)
Jumping Mouse		
(Zapus species)	0	14 (2%)
Moles		
(Scapanus species)	0	14 (2%)
Birds		
Starling		
(Sturnus vulgaris)	0	14 (2%)
Blackbird		
(Agelaius phoeniceus)	0	7 (1%)
Total	434 (100%)	719 (100%)

In total 1,153 skulls were recovered from pellets, 434 from Vancouver Island and 719 from the Lower Mainland. The accompanying table shows that fewer animal groups were taken as prey on Vancouver Island, but that in both areas the vole (*Microtus townsendii*) was the principle prey. On Vancouver Island, Deer Mice and rats were important secondary prey, while on the Lower Mainland only Shrews were other important prey. Jumping Mice and moles do not occur on Vancouver Island (Cowan and Guiguet 1978) and therefore were not taken as food.

The three main prey species on Vancouver Island are all woodland species which are found along forest edges where the owls hunt, while on the lower mainland all prey species are associated with open agricultural fields (Cowan and Guiguet 1978). Also the number of different kinds of small mammals on the Lower Mainland is greater than on Vancouver Island, probably as a result of the last ice age.

These findings show that the diet of the Common Barn-Owl does vary geographically in British Columbia between an island and a mainland population. This is probably due to the poor number of mammal species on Vancouver Island which did not disperse there during the last ice age. Also differences in habitats (that is, open woodlands on Vancouver Island and fields on the Lower Mainland) provide hunting areas with different numbers and kinds of small mammal prey.

References

Bunn, D.S., A.B. Warburton and R.D.S. Wilson. The Barn Owl. Buteo Books, Vermillion, South Dakota. 264 pages.

Cowan, I. and C.J. Guiguet. 1978. The Mammals of British Columbia. British Columbia Provincial Museum, Victoria. 414 pages.

Editor's Note: This paper was entered as a project in the Vancouver Island Regional Science Fair when Sean was a Grade 8 student at Arbutus Junior—Secondary School in 1987. He won first in the Junior Division, the Fair's Scientific Merit award, and the East Bay Science and Nature Company's award for "excellence in natural history".



Young Common Barn Owls

R.W. Campbell

More on Plastics

By Wilford Medd

The article by Carol Bosy in *The Victoria Naturalist*, November-December 1987, "Marine Debris and Entanglement", brought many of the problems associated with plastics to our attention. Some subsequent developments and reports should now be discussed.

First, our organization the FBCN has not been neglecting the plastics issues. Policy guidelines with respect to plastics have recently been developed by the Educational and Environmental Committees of the FBCN; these will presumably be available for our attention in due course.

Also, according to a news release from the Ministry of Environment and Parks, a Minister's Environmental Award in the business/industrial category was recently given to Canada Safeway Ltd. "for introducing photodegradable plastic grocery bags in its stores."

There is always, of course, a tendency to easily accept the idea that a nasty problem has been solved, or just about solved, or at least that a major step forward has been taken.

Not to deride any improvements, but what exactly has been accomplished by the introduction of this photodegradable plastic? There are some obvious questions. Just exactly how does it happen? Why don't all stores and manufacturers use it? Why doesn't the government, instead of just passing out a prize, make it compulsory? Or do they intend to do so?

Presumably information is available from various sources; there is a very good summary to be found in *Canadian Consumer*, July 1988, page 35.

The ordinary everyday ubiquitous plastic, which includes almost all of it, hardly ever seems to disintegrate or degrade or decompose. It does in fact do so, we are told, but that process is expected to last for at least 200 years. A presentation on Victoria Channel 9 T.V. suggested 400 years, while Channel 2 made it 500. A "Dear Abby" column came down with an optimistic 50 to 80 years. Whatever, it just isn't in a hurry.

However, the photobiodegradable plastic—the type used by Safeway for their shopping bags—breaks down when exposed to ultraviolet light such as in sunlight (but does not break down when buried). So after getting thrown away along the sidewalks and on the beaches, it will degrade, break into pieces and benevolently mix with the soil in a short time. Some say in one month. Another article I read suggests some time between 15 months and 5 years.

There are other kinds of biodegradable plastics which will not degrade in sunlight but will degrade when buried in soil or submerged in water. How long it takes I do not know. Also there seems to be a question as to whether these plastics do or do not give off dangerous gases when degrading. And you certainly don't want to burn them. Some countries make the use of this type mandatory in certain applications. Maybe we

should, too. This type of plastic has been rather feeble stuff, but recently an American chemist has found a way to toughen it up.

Regardless of the type of plastic being used, why not separate it out in our recycling program, boil it up (or whatever the method) and use it over again? This is not economically viable, apparently, and in any case it's beset with problems. But there has been a newspaper report that, in Michigan in 1990, Dow Chemical Co. will process miscellaneous plastic in a new venture starting with a pilot plant to study the technology. Is there anything of this nature in B.C. or Canada?

All this discussion certainly does not suggest any simple clear-cut solutions. To quote the *Canadian Consumer* article (which quotes the Environmentally Sound Packaging Coalition), "biodegradable plastic is a positive step forward, but it is no final solution to the problem of plastic waste." Unfortunately, the concerns and responsibilities expressed in Carol Bosy's article still apply. It remains a serious problem.

WALKING HOLIDAYS IN BRITAIN

* More Destinations in 1989 *

Scottish Highlands, Trossachs, Lake District, Yorkshire, Cotswolds, Dorset, Somerset, Devon, Cornwall, Isle of Wight, Snowdonia, Welsh Coast, Wye Valley and S.W. Ireland.

A choice of holiday for the mountain climber, hiker or moderate walker

Any date departure & return from Victoria March to October 1989

6/7/14 night walking holidays or short 3/4 night breaks. Arrangements made for airfare, London or other hotel & rail travel.

For more information and brochures, call or write:

JANET VENN

Godfreys Travel of Canada Limited. #103 - 1701 West Broadway Vancouver, B.C. V6J 1Y2 (604) 731-8294



H.R. (HARRY) LEPP

Midland Doherty Limited

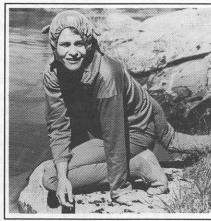
Suite 300 International House 880 Douglas Street Victoria, B.C. Canada V8W 2B7

Bus.: (604) 388-6411 Res.: (604) 477-9386

On the Art and Drama of Nature

By Faye Mogensen

Painting is one of my hobbies, and for a brief period I did little but paint. During this time the people I knew could hardly believe that in summers I worked as a park interpreter, teaching about the natural world. How, they wondered, could I be interested in science and art at once? The two fields



are completed unrelated; the artist and the scientist view the world of nature with altogether different sets of glasses.

I do not entirely disagree with my friends. However, during the past seven years of "interpreting nature", I have come to reconcile my divergent interests. I have an analytical mind, yet once I have read and digested scientific fact, I can't help but revert to my artistry—thinking sideways instead of in logical sequence.

Lateral thinking can be a long and slow process. The start of every season of work is busy. Evening programs preparation entails the greatest effort. Never content to simply give a slide show, I compose a poem or unearth music to complement my theme. Never content to stand up and lecture, I play the role of oldtimers or creatures from nature.

Animal shows aren't too difficult. We can all relate to an animal's basic biology. With minor variations, it usually has a head, body and legs. If we add wings, cork boots, a helmet, a stiff rake, a hammer, a chisel, needlenose pliers, eye-glasses, an earphone, sticky tape, a small skewer, a toothbrush and a party serpentine—you guessed it—we have a woodpecker.

If instead we add another set of limbs, a pair of veined wings (preferably constructed with mosquito netting), and meterlong proboscis and antennae, what do we get but a giant and fearsome mosquito? Thank goodness it is an expert on repellents.

Plant shows are different.

About three years ago I decided I'd like to do a program about trees. Should I transform into a tree for the evening? Should I roleplay Tolkien's Gandalf who walked amongst the trees? Should I roleplay an oldtimer who tells tales of tall trees? Two years later, just prior to a summer of work, I spent a week at a cabin in the woods. Suddenly I knew what to do. I would not only become a tree, I'd become the forest!

The cast includes diverse characters: a tall and tranquil tree, a chattering squirrel (fraught with "coney" jokes), a cackling witch (expert on witches' broom), a wily woodpecker (stalking insects), a shade-loving salmon and an old owl (wise to the destiny of fallen trees). A "fun guy" called Mike O'-Rhizial never appears, but we hear about his association with the tree. In describing the function of the tree in their own lives, this medley of characters describes the rich life of a tree from its youth to its death and the interconnectedness of all forest inhabitants. I call this short drama "The Tree of Life". Like all my other "Nature Dramas", it is constantly evolving and improving.

Undoubtedly, I am guilty of anthropomorphism. Since my audiences and I have so much fun, I wonder whether it matters. When audience members return a year later and remember the scientific facts I have dramatised, I am sure the anthropomorphism is justified.

If you would like to know more about Nature Dramas, feel free to call or write to me at the Swan Lake Nature House. I'm dying to perform: for schools, community groups and anyone who is keen. A generous grant from Science Culture Canada has enabled me to produce these programs for a reasonable fee. Contact me at 479–0211.

If you would like to see a nature drama, there are several opportunities, all with free admission.

Sunday, March 5. 2:00 p.m. "Tree of Life". Francis King Park.

Monday, March 27. 2:00 p.m. "Froggy Feats". Francis King Park.

Friday, March 31. between 10:00 a.m. - 4:00 p.m. "You Otter Know". RBCM.

Saturday, April 22. between 10:00 a.m. - 4:00 p.m. "Tree of Life". RBCM.



Canada Geese: Identifying the Subspecies

By Hank Vander Pol

The complexities of the many Canada Geese subspecies (Branta canadensis) were introduced to the reader in the March/April 1988 issue of The Victoria Naturalist. Although it is generally known that Canada Geese have developed into various closely related subspecies, few of us pay any more attention to this goose beyond simply identifying it as a Canada Goose. And for good reason! All Canadas look alike, the only noticeable difference being size and colour variation.

Subspecies identification seems an inexact science at best, fraught with natural variations and overlap between them. When subspecies mix on the wintering grounds or during migration, identification becomes even more challenging. This article will attempt to assist the reader in identifying, through field observation, the different subspecies which winter in or migrate through the Victoria area.

There is still not complete agreement about the number of subspecies. They vary from eight (Palmer 1976) to twelve, including one extinct (Delacour 1959). The American Ornithologists' Union recognizes ten subspecies. Generally, however, eleven subspecies are accepted (Johnson 1979), all of them resident in North America.

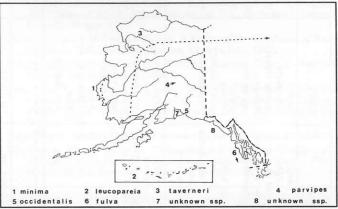
For Canada, Godfrey (1986) mentions ten subspecies, but he would have recognized eleven had specimens of *occidentalis* been available to him at the National Museum in Ottawa. My own observations have confirmed that this subspecies regularly winters in the Victoria area.

In the west, seven subspecies are commonly recognized (Johnson). In order of decreasing size, these are: 1. *moffitti* (Great Basin or Western Canada Goose); 2. *fulva* (Vancouver Canada Goose); 3. *occidentalis* (Dusky Canada Goose); 4. *parvides* (Lesser Canada Goose); 5. *taverneri* (Taverner's Canada Goose); 6. *leucopareia* (Aleutian Canada Goose); and 7. *minima* (Cackling Canada Goose).

Both Munro (1947) and Guiguet (1973) noted that four subspecies could be found in British Columbia. However, this was based on a pre–1957 classification system which recognized only five subspecies for North America. Hatler *et al.* (1978) notes three subspecies for Pacific Rim National Park (Dusky, Vancouver, Cackling). Specimens examined at the Royal British Columbia Museum predate 1950 and are mostly classified according to the old system. Victoria Natural History Society Annual Bird Reports from 1959 to 1972 mention the Greater, Lesser, Cackling and Aleutian subspecies. The reports, however, contain a mixture of new and old classifications. For example, prior to 1957 the Lesser had the Latin name *leucopareia*. Since 1957, that subspecies was split in two and given the Latin names *parvides* and *taverneri*. As well, the subspecies *canadensis* is noted as the goose intro-

duced in the Victoria area some 30–40 years ago (Guiguet 1973, Taylor 1984). However, what was known as *canadensis* prior to 1957 is now known as *moffitti*, and *canadensis* is now a maritime subspecies. The geese introduced in this area are thus *moffitti*, a bird of the interior of B.C.

The Alaska map shows the breeding ranges of six subspecies. Birds breeding in Alaska migrate down the Pacific flyway and could appear in the Victoria area. Three subspecies (Cackling, Aleutian, Dusky) breed exclusively in Alaska, while Taverner's and Lesser breed also in northern Canada. The Vancouver breeds along the northwest B.C. coast, and the Western breeds in the interior and the prairie provinces. Although the majority migrate and winter in Oregon and California, the Vancouver goose is relatively sedentary, as only 2% actually migrate south (Ratti et al., 1979).



There is a gradual increase in size between the smallest (Cackling) and largest (Western) subspecies. Colour varies not only between the various subspecies but also within the same subspecies, as juvenile birds in the darker races tend to be lighter (Johnson). There is evidence that some subspecies bordering each other on the breeding ground sometimes interbreed, producing intermediate individuals (Delacour 1959). The subspecies introduced in the Victoria area has interbred with other subspecies which escaped from local breeding stock. It is highly unlikely that the geese found here in summer are a "pure" subspecies.

Johnson (1979) attempted to distinguish subspecies by measuring and combining nine morphological characters such as culmen, tarsus, weight, etc. He found that subspecies adjacent on the gradient of overall size do exhibit considerable overlap in many measurements, and even using this method, there can result a misclassification of up to 13% (Campbell 1988).

The best time to identify subspecies is during fall migration. Canada geese start arriving in this area in early October, peak in mid–November and taper off towards the end of December. Up to 1,000 birds can be seen here during November. Prime areas to see them are Martindale flats, the Blenkinsop valley and Esquimalt Lagoon. Subspecies seen last fall included Cackling (4), Lesser (450), Taverner's (200) and Dusky (150). I believe a group of 25 Western was present at Blenkinsop for a while, although some doubt existed as to subspecies.

1	CACKLER	ALEUTIAN	TAVERNER	LESSER	DUSKY	VANCOUVER	WESTERN
Colour and Size	"Dark Brown Breast "Smallest "1 1/2 times size of Mallard "Short stubby bill ""Puffy" head "Short Neck	"Dark "Grayish/Brown Breast "Small Size	"Still Darkish but lighter than busky "Darker than Lesser and Western "Grayish breast "Slightly smaller than Lesser than Lesser "20% smaller than	"Breast Sandy or Buffy Cast compared to Taverner's Grayish "Much lighter than Dusky "Over all body colour lighter "Size of Snow Goose "Faint barred pattern on side	"Dark, chocolate brown breast "Darkest goose but colour varies "Bark overall "Medium size	*Dark coloured breast, slightly lighter than dusky **Large goose **Looks like dusky but larger and lighter **Size similar to western	"Very light breast hlargest and lightest goose "Long neck
Necking and Collar (neck rings always white)	*Neck seems to merge with breast, but some have solid white ring *Yellow collars	"All have conspicuous broad white ring completely encircling lower neck, averaging 14-20mm in width	"More Distinct break between neck and breast "71% have complete or trace neckring averaging 5mm in width	*8% have full ring averaging 8 mm in width *30% have trace ring	"Neck seems to merge with breast "6.5% have neck ring averaging 5mm "14% trace ring	*Neck more clearly separated from breast *** *********************************	"No neck ring "Some have light gray collars
Voice	"High pitched yelping	"High pitched		^	Voices Similar	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	
Flock	"Small in this area		*Large flocks up to 200	Large flocks up to 200	"In flight, flocks usually less than 40		"Small in this area
Behavior	*Least wary	*Not wary	"Wary - may circle many times before landing in large open fields	"Similar to Taverner's	"Not wary - likely to fly low "Prefers smaller flelds often surrounded by bushes	N/K	*Not wary - found anywhere
Arrival	October	Late October	Early November	Early November	Early October	N/K	N/K
Bill	"Under 32mm "As small as 23mm	*Under 32mm	#32-40mm	м32-40 mm	"40-50 mm	"Over 50 mm	*Over 50 mm *Large looking bill
Wing Shape and Beat	"Rapid beat	"Rapid beat	"Wing appears narrow and relatively long in proportion to body	«Similar to Taverner's	wWing appears broader in proportion to length	*Siow beat	"Slow beat
Occurrance in Victoria	"A few seen al- most each fall Blenkinsop and Martindale	*None reported for some time	"Common mostly Martindale and Elk Lake	"Common mostly Martindale and Elk Lake	"Common in Winter at Blenkinsop	"None reported but should be looked for	"Uncommon "Summer resi- dents look like them

Some points to remember when observing geese:

 As only 2% of Vancouver Canadas migrate, they probably occur only in small numbers.

 The Aleutians take a direct transoceanic flight from their breeding grounds on the Aleutian islands to northern California, and visa versa (Woolington et al., 1979). No confirmed records exist to my knowledge for this area.

 A goose with a red collar is a Dusky (Blenkinsop mostly).
 Use this bird as a comparison to identify other subspecies (see chart).

4. Subspecies mix during migration, but even within a large flock the same subspecies stay closely together.

Western migrate south from central B.C. and are not often found on the coast.

Taverner's and Lesser are most difficult to separate, as are Dusky and Vancouver.

7. As the introduced subspecies are probably mixed, none are likely to be a "pure" subspecies. Don't spend a lot of time on summer birds.

The accompanying chart should be of some help in the identification exercise. Just remember, you can't identify them all, but aim for identifying the majority.

You may receive this issue of *The Naturalist* when spring migration is underway. Our wintering geese may have left. Should you not have had an opportunity to use the chart and

test your skills in the field, you can join me next fall when I plan to organize a goose identification field trip.

References

American Omithologist's Union. Checklist of North American Birds. 5th Edition, 1957.

Campbell, Bruce H. Biologist, Department of Fish and Game, Anchorage, Alaska. Pers. Comm., 1988.

Delacour, Jean. The Waterfowl of the World. Country Life Ltd., London, England, 1959.

Godfrey, W. Earl. The Birds of Canada. National Museum of Canada, Ottawa, Ontario, 1986.

Guiguet, C.J. The Birds of British Columbia, (6) Waterfowl. 1958. British Columbia Provincial Museum, Victoria, B.C., 1973.

Hatler, David F., R. Wayne Campbell and Adrian Dorst. Birds of Pacific Rim National Park. The British Columbia Provincial Museum, Victoria, B.C., 1978

Johnson, Douglas H., Daniel E. Timm and Paul F. Springer. "Morphological Characteristics of Canada Geese in the Pacific Flyway". Management and Biology of Pacific Flyway Geese. Ed. R.L. Jarvis and J. Bartonek, Corvallis, Oregon, 1979.

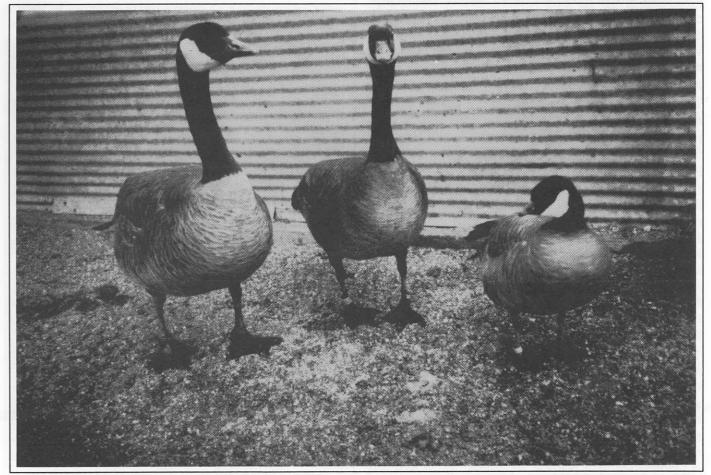
Munro, J.A. and I. McTaggart-Cowan. A Review of the Bird Fauna of British Columbia. B.C. Provincial Museum, Victoria, B.C., 1947.

Oregon Department of Fish and Wildlife. Canada Geese in Northwest Oregon. Portland, Oregon, 1988.

Ratti, John T., and Daniel E. Timm. "Migrating Behavior of Vancouver Canada Geese: Recovery Rate Bias". Management and Biology of Pacific Flyway Geese. Ed. R.L. Jarvis and J. Bartonek, Corvallis, Oregon, 1979.

Taylor, Keith. Birder's Guide to Vancouver Island. Victoria, B.C., 1984.

Woolington, Dennis W. et al. "Migration and Wintering Distribution of Aleutian Canada Geese". Management and Biology of Pacific Flyway Geese. Ed. R.L. Jarvis and J. Bartonek, Corvallis, Oregon, 1979.



Vancouver, Dusky and Cackling Canada Geese

Hank Vander Pol

Growing Native...

Some Notes on Growing Some of B.C.'s Dodecatheons

By David F. Fraser and Terri Suttill

Dodecatheon is described by Clark (1976) as "a gracious genus." For the gardener, early spring blooms of gracefully reflexed petals in shades of pink, purple and cream on delicate stems make this a tempting group of plants to experiment with. B.C. has a good selection of *Dodecatheons*, from species that live in perpetually damp spots to those of the arid interior, the high mountains and the wet winters and arid summers of the Gulf Islands. Within this range is at least one *Dodecatheon* for every garden.

D. pulchellum (Raf.) Merrill is widespread in B.C. and occurs in a wide variety of habitats: estuaries, maritime headlands, grasslands and alpine meadows, among others. All these sites have saturated or near–saturated soil during the bloom season, but by the time that the seed capsules are ripe all but the estuarine sites have dried out.

There is a high-elevation form, *D.p.* var. *watsonnii* (Tidestrom) C.L. Hitchcock, a dwarf, delicate, few-flowered form found in high elevation in rocky habitats. This ecologically narrow form seems to be different from a yet undescribed form found on some rocky headlands on southern Vancouver Island and in the Gulf Islands that has been called the Maritime Shooting Star (Guppy 1987). It is also a dwarf plant, but is very floriferous.

The plants in all sites die back, and by late summer the location of a plant may be hard to determine if there is no capsule present. Herein lies one of the most difficult parts about gardening with *Dodecatheons*: dormant plants are often presumed dead and gone, and thrown out.

D. pulchellum grown from low-elevation sites grows well in the garden and also in pots, even plants from estuarine populations. Plants can be allowed to dry out totally in midsummer. High-elevation populations of Dodecatheon pulchellum seem to be trickier, with plants from Mt. Arrowsmith experiencing high mortality in experimental work by Suttill. There are some plants that appear to do fairly well in Victoria gardens from high elevations so perhaps it is just a matter of fine-tuning a site. High-elevation plants like var. watsonii might best be tackled in an alpine house.

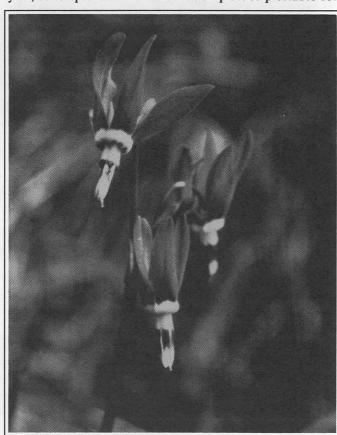
This shooting star can be propagated by seed, and Suttill has had success with a technique modified from Turner and Quarterman (1968) with stratification at 4 C in the dark, in sealed plastic dishes on wet paper for 7 or 8 weeks and then moving the seeds to a growth chamber on a 12-hour photoperiod at temperatures of 25/10C. For the home gardener, sowing the seed outside and letting nature do the work is probably the most practical suggestion. Fresh seed may germinate immediately if sown in late spring and kept moist.

Germination success varies a lot between populations. Suttill (1987) found germination ranged between 0% and 60%.

After the seeds have germinated, you can expect a wait of 2 or 3 years for the plants to bloom. A word of caution: some seedlings "disappear" for a year, so don't be too quick to throw out an empty-looking pot or fill in a garden space.

Dodecatheon cusickii Greene is found in the southern interior areas of B.C., Washington, Oregon and Idaho. It appears to have a more limited preferred habitat: drier grasslands that do not have surface water during the blooming period, although Suttill has found it on a moist south-facing slope in Manning Provincial Park. D. cusickii is densely hairly and has a faint sweet scent. D. cusickii appears to be more difficult to grow in Victoria and, like the high-elevation forms of D. pulchellum, suffers from high winter mortality in our damp climate.

D. hendersonii is the common species found on the rock outcrops around Victoria and the Gulf Islands. It has a broad, flat rosette of wide leaves and does well in the garden in areas that are moist in the winter but dry out completely in summer. Fraser has had good success in germinating fresh seed, and the plant is also easily propagated by dividing out the offsets from the parent plant. Like the other Dodecatheons, it also shrivels in the heat of the summer and by August it is easily overlooked; we've had plants in our nursery thrown out and presumed dead at the end on season clean—up. From time to time, in our experience, D. hendersonii also has a tendency to remain dormant over an entire growing season — skipping a year, so to speak. Good conservation practise precludes col-



Dodecatheon pulchellum

Terri Suttill

lecting plants from the wild; however, keeping an eye on the path of "progress" will often let you salvage some plants from the path of the bulldozer's blade.

Dodecatheon dentatum Hook is a unique member of the genus in British Columbia in being white flowered and dentate leaved. Clark (1972) recommends this as a garden plant for a wet seep in the shade. The species is easily propagated by removing offshoots from mature plants.

Dodecatheon jeffreyi van Houtte grows in wet meadows at middle elevations and Kruckeberg (1982) recommends it along with *D. dentatum* as a garden plant for wet sites. Both of these plants cannot tolerate being dried out, so their culture is very different from the other species of *Dodecatheon* discussed here.

Whatever your garden is, you should be able to find a site for at least one of British Columbia's beautiful *Dodecatheons*.

References

Clark, L.J. 1976. Wildflowers of the Pacific Northwest. Evergreen Press Ltd., Vancouver B.C. 604 p.

Guppy, A. 1987. The Beautiful Maritime Shooting-star. The Victoria Naturalist, Vol. 44 July/August. p. 12-13.

Kruckeberg. A.R. 1982. Gardening with Native Plants of the Pacific Northwest. Douglas and MacIntyre, Vancouver. 252 p.

Suttill, Terri-Ann. 1987. Systematics and reproductive biology of Dodecatheon pulchellum s.l. (Primulacea). M.Sc. Thesis. University of Victoria.

Turner, B.H. and E. Quarterman. 1968. Ecology of *Dodecatheon meadia* (Primulaceae) in Tennessee glades and woodland. Ecology 49:909–915.



Here is a lifetime binocular that won't take a lifetime to finance! The 8 x 36 custom from Bausch & Lomb combines sharp, bright optics with light weight and comfort. Good close focus, and long eye relief for eyeglass wearers.

\$275.00

the field-naturalist

Special order book service for naturalists

P.O. Box 161, Brentwood Bay, B.C. VOS 1A0 Telephone 652-1529

Skylarks — Another Little Bit of Old England

By Barbara Begg

The Eurasian Skylark (Alauda arvensis) belongs to the Alaudidae, or Lark family, which is comprised of 75 species worldwide. Some characteristics most species of the Lark family share are a long hind claw, elaborate songs, the universal trait of feeding and nesting on the ground, and favouring expansive fields. The Latin genus name Alauda means "lark", and the species name is from arvum, meaning "field". So we have, literally translated, a field lark-just as appropriate as the common name "Skylark". There are several subspecies of A. arvensis, the one introduced here being the nominate race from Europe and the British Isles, A. arvensis arvensis. The few Skylarks reaching western North America unassisted have been identified as northeast Asian subspecies. In Europe and Asia there is a southward movement of Skylarks in the winter, with northern birds joining more southerly populations and some migrating further south.

The Skylark, a sparrow-sized bird, is streaked with brown above and on the throat and breast below, and has a whitish belly. It has a slender bill, a fairly prominent supercilliary line and a short, erectable crest. The outer tail feathers are white, conspicuous in flight, and the trailing edge of the inner flight feathers is also white, but less prominent. It walks or runs rather than hops. It is a nondescript bird, but what it lacks in feathered finery it makes up for in its soaring, high-rise flight song, rendered unbroken for up to ten minutes. This song is broadcast over its preferred habitat, large, undivided fields with a distant horizon. In North America, the two remaining populations are basically sedentary, remaining faithful to their breeding area year round, except during the coldest weather, at which time they gather in flocks at a common location where food is more accessible. Their diet in summer consists predominantly of insects; in winter more seeds are eaten. Leaves are utilized rarely, usually when more desirable food is snow-covered.

Because of their beautiful song, Skylarks have been introduced, with varying degrees of success, in a number of different locations in the world, including New Zealand, Hawaii, California, Oregon, New York and British Columbia (lower Fraser Valley, Duncan and the Greater Victoria area). In North America, only the Victoria introduction became established for any length of time. Other North American introductions failed mainly due to less than ideal climate conditions—too cold, too wet, or possibly too hot, as in the San Jose, California, release. In the Greater Victoria area, weather more closely resembles that of the Skylark's native home.

The original Victoria introduction in 1903 by the Natural History Society of B.C. consisted of 98 or 99 individual Skylarks. (200 Skylarks, along with various other European bird species, were ordered through a New York bird importer. Many of the other species died en route, but 198 Skylarks survived the

journey. One half of the shipment went to the lower B.C. mainland.) After about one month's rest in the aviaries in Beacon Hill Park, this first shipment of Skylarks was released at Duncan, North Saanich, Colwood and in the Cedar Hill, Jubilee and Beacon Hill districts of Victoria. In 1913, the Society introduced another 49 birds, divided between Rithet's Farm at Royal Oak (34), Lansdowne Road area (9), and Cadboro Bay (6). Two private releases of undetermined total numbers occurred between about 1908 and 1919 in fields at the present University of Victoria campus and in Oak Bay (documented, Sprot).

The Skylark population grew to close to 1,000 birds by March 1962 (D. Stirling, R.Y. Edwards), and to 1,000 according to a year-end estimate by Stirling in 1966. The 1962 estimate was substantiated by record high Christmas bird counts in 1964/65 of 812 and in 1965/66 of 969, both during periods of deep snow cover and resulting concentration of birds, probably including those from outside the count zone. These concentrations generally take place at Martindale Road flats due to above-average winds clearing small patches of ground and also because of winter crops extending above the snow. Under these times of stress, small numbers of Skylarks were found in such unlikely places as barnyards, under feeders, on road edges and beaches. Counts declined after 1966, with minor partial recoveries. The 1968/69 Victoria Christmas Bird Count recorded 208 Skylarks. This, one of the most severe winters endured in this region, prompted David Stirling and Ray Beckett, aided by public donations, to conduct a feeding program. They set up seed stations at five locations on the Saanich Peninsula. On February 2, 1969, a thorough conservative count found 777 Skylarks.

The University of Victoria site was a favourite Skylark area for many years, and the last stronghold close to the city. In 1970, Roderick Haig-Brown, as Chancellor of the University. was addressing the Convocational gathering, which was held outdoors at that time. It was May and the Skylarks were singing above, which proved quite a distraction for speaker and audience alike. At one point he paused, looked skyward, and interjected: "Perhaps they can become a symbol of the University" (rather than the Martin). As the students and campus buildings increased, the bird population decreased. Thanks to the efforts of Dr. Jeremy Tatum of the Physics and Astronomy Department, a small field, to become known as "the Skylark field", between the Cornett Building and the playing fields, was set aside. This field was posted with "no trespassing" signs and left uncut during nesting season. However, added activity due to the construction of the University Centre in 1978, not to mention the annual kite festival held in April, spelled the demise of the Skylark field and the Skylarks at the University. For a few years thereafter, there were sightings in the Gordon Head district, but no nesting (pers. comm., J. Tatum).

There is a small Skylark colony on the dry slopes of southwest San Juan Island, Washington, which apparently was founded, unassisted by man, by birds from the Saanich Peninsula populations. The first record was in August 1960, and there



Skylark near nest, University of Victoria grounds. July 17, 1965.

Tom Sowerby

were up to 63 Skylarks counted there in August 1973. Varying lesser numbers have been reported since, up to and including 1988.

There have been only isolated Skylark sightings elsewhere in recent times. One bird was seen near Ladner in February 1975 (Weber), and single Skylarks, one singing, at the Vancouver International Airport in July 1970 (Audubon Field Notes) and at the same location in May/June 1977 (Poynter).

Although the Victoria importation was the most successful North American introduction, the present Skylark numbers seem to be very precarious. An optimistic estimate of perhaps 100 individuals is not exactly a viable population. This decline can be attributed to a number of factors, such as habitat loss, people (and their animals), pressure, altered agricultural practices (cutting three or four times a season for silage, more irrigating, fewer fallow fields, increased use of chemical fertilizers), a few severe winters, and the increased competition from birds such as Water Pipits, Goldfinch, Starlings, Brewer's Blackbirds, Savannah Sparrows and Killdeer. The Skylark is in trouble here.

My personal involvement with Skylarks initially was, like a very rare bird, accidental. I have the good fortune to live near "Skylark country", and our road is listed in some bird-finding guides as a good place to locate Skylarks. The birds can no longer be heard from our property, but they are not far away, so I have the honour of rescuing birdwatchers from the end of our road and showing them Skylarks at the nearby airport or agricultural fields. Many out-of-town birders are also referred through the Victoria Rare Bird Alert network. As the Skylark numbers appear to be dwindling, and are now found in only about six areas on the Peninsula, unless they are singing they are difficult to find without knowing exact locations. In our area, they sing mainly from the beginning of March through to the end of July. In spite of the fact that most visiting birders I am in contact with have lengthy life lists and knowledge to match, it is usually almost impossible for them to find Skylarks without assistance. Often they are short of time as they have planned tight schedules to try to wrap up gaps in their lists. (I hear the same general game plan frequently-Manning Park, Vancouver for Crested Myna, Pacific Rim Park, a pelagic trip and Victoria for Skylarks.) Their lists are usually life lists, but can be for ABA or AOU areas, Canada, or a "big year". Of course, there are perks for my efforts. Besides being rewarding and enjoyable, from many birders I receive letters and cards, trip lists, check lists, books and offers of reciprocal assistance. In just over two years, I have had the pleasure of helping birders from twenty-four states and four provinces (some several times), plus England, Scotland and Australia.

There is often something different to make things even more interesting, such as the fellow from Vancouver who is dedicated to taking a picture of each "lifer"—not an easy task with Skylarks. Sometimes we have the good fortune of having Skylarks sing off season, as they did for Arizona and Oregon birders October 31, October 24 for a Calgarian, and for a Maryland visitor on November 13 one year. These were all during a little clearing period after a rain and at the time of year when the procreative instincts are briefly and moderately awakened. Then there was the lady from Virginia and the

man from Vancouver whom I had arranged separately to meet, and on the way I gathered up two more searchers, from California and Texas, from the end of our road, to form our own little tour group. Two days after taking out a couple from Toronto, we were sharing the same pelagic trip out of Ucluelet. And there are even repeat "customers", such as the two from Arizona and Oregon who came back the next year with a friend from Pennsylvania.

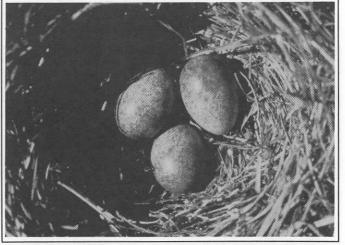
One of my fondest memories of "Skylarking" was actually while "Owling"! There was an irruption of Snowy Owls during the winter of 1984/85. On a cool but sunny November morning, preceded by three days of a mixture of snow, rain and wind, I watched four Snowy Owls perched on small airplanes at the Victoria airport and listened to Skylarks singing at the same time—quite a combination.

Although Skylarks almost always perch on the ground, there is one location on the Saanich Peninsula that I have visited on only four occasions, and each time Skylarks have perched on and called from posts, perhaps a total of thirty times. In several instances, the calls came close to becoming songs. (My Scottish birder told me he has, a number of times, heard Skylarks in full song while perched on posts in Scotland.) Twice at the same area, but on different days, I watched a Skylark perch on the top of a tree, about four feet in height, once only for a few seconds, but the other time it remained on the tip of the tree for several minutes.

Another day, at the airport, I watched a Skylark taking a dust bath, but unfortunately I didn't have a visiting birder with me.

Skylarks often hold their ground until they are nearly underfoot. Once while with people from New York and viewing birds from a distance of about seventy–five feet, we witnessed two groups of walkers go by the Skylarks, not more than six feet from them. The birds just crouched down and went completely unnoticed. This would suggest that in an open winter census, many birds would likely go uncounted.

Skylarks seem to be one of the very few examples of exotic birds or mammals that have not had an adverse effect on native species, and I am grateful to the settlers who wished to bring with them to their chosen country a reminder of home.



Skylark nest, UVic grounds. July 17, 1965.

om Sowerby



Skylark on nest, UVic grounds. July 17,1965.

T. Sowerby

February 18. After a snowfall of about 25 cm, I found 76 Skylarks, mostly in a single flock, working agricultural fields in the Central Saanich Road and Wallace Drive area. In a check of most of the other known Skylark locations, I found no more birds. The birds seem to have gathered in the locale having the most exposed vegetation. By coincidence, I was able to show a visting birder from Winnipeg all 76 birds. The following day, after much snow had melted and there was more bare ground, the birds had apparently dispersed.

References

Audubon Field Notes, Vol. 24, No. 5, Oct. 1970.

Bruce, J.A. 1961 "First Record of European Skylark on San Juan Island, Washington" The Condor, Vol. 63.

Grinnell, J. 1936 "Further Notes on the Status of Skylarks on Vancouver Island" The Condor, Vol. 38.

Morlan, J. and R.A. Erickson, 1983 "A Eurasian Skylark at Point Reyes, California, with Notes on Skylark Identification and Systematics", Western Birds Vol. 14, No. 3.

Poynter, G.A. 1977 "An Additional Note on Skylark Sightings", The Discovery, Vol. 6, No. 3.

Roberson, D. 1980 "Rare Birds of the West Coast", Woodcock Publications, Pacific Grove, California.

Sprot, G.D. 1937 "Notes on the Introduced Skylark in the Victoria District of Vancouver Island", The Condor, Vol. 39.

Stirling, D. and R. Beckett 1969 "Operation Skylark", The Victoria Naturalist, Vol. 25, No. 8.

Stirling, D. and R.Y. Edwards 1962 "Notes on the Skylark on Vancouver Island, The Canadian Field Naturalist", Vol. 76, No. 3.

ENGLAND'S LAKE DISTRICT Spring and Fall

Birdwatching and Wildlife Week

7 nights

from £245

Gardens Tour

7 nights from £240

for more information, call or write:

IANET VENN

Godfrey's Travel Of Canada Limited #103–1701 West Broadway, Vancouver B.C. V6J 1Y2 (604) 731-8294



HARD TO FIND NATURAL HISTORY BOOKS

Taverner, P.	THE BIRDS OF CANADA (1945 ed.)	\$40.00
Godfrey,E.	THE BIRDS OF CANADA *	\$30.00
Salt & Wilk	BIRDS OF ALBERTA (1972)*	\$28.00
Peattie, D.C.	GREEN LAURELS *	\$30.00
McGowan, D.	A NATURALIST IN CANADA (1st ed.)	\$25.00
Smeeton, M.	MOOSE MAGIC (signed)	\$16.00
Brown, A.	OLD MAN'S GARDEN (signed)	\$14.00
Fairchild, D.	THE WORLD WAS MY GARDEN (1st ed.)	\$36.00
Swift, E.	A CONSERVATION SAGA (Nat. Aud. Soc.) *	\$18.00
Teale, E.W.	A WALK THROUGH THE YEAR (1978 HB)	\$16.00
Ley, W.	THE LUNGFISH, DODO, & UNICORN (1948) *	\$20.00
To order, call:	Diane Wells, 474-6227	
or write	THE WELLS BOOK GROUP, 958 Page, Victoria, B.C. V9B 2M	/ 16
	* Out of Print	
-Many othe	r such "Gems" are on our si	helves.

Books

By A.R. Davidson

The Society's library is being transferred to the Nature House of the Swan Lake Sanctuary.

This little library was started about thirty years ago and now contains 318 books, practically all donated by members and friends. Every book was given a number, the name of the donor and the date, and then a card.

The library was a going concern for many years; then as times changed more money was in circulation and the members bought their own text books. Personally, I got much pleasure out of it. I love books, and some of the donated books were remarkable. Let me list a few.

The Shore Birds of North America was given to our Society on the occasion when the Seattle Audubon Society held their annual convention in Victoria in 1970. Our Society being the hosts were presented with this magnificent book with superb paintings.

Then a Mr. Kelly, whose father had been one of our members for many years, gave us six volumes entitled *The History of British Birds* by the Rev. F.O. Morris, written in 1857 and dedicated to Queen Victoria, no less. Every bird had an illustration by John Gould and the plates were all hand-painted. This set is the 4th Edition issued in 1895. Quite a gift, that one.

I think my favourite of all these books is *The Birds of the World*. "Here is a spectacular presentation of all the bird families of the world—a richly informative volume, magnificently illustrated with 300 specially commissioned paintings in full colour." It was five years in the making. This astonishing book was given to the library by Mr. and Mrs. E.J. Chaloner. He was in charge of the ushers at the lectures of the National Audubon Society while Eleanore and I were the ticket sellers at the door from 1962 until 1985 when the attraction of TV reduced our former full audiences. It was during these years that our Society benefited substantially from the proceeds of these lectures, due to the efficient management of Enid Lemon.

Included also are the two books published by the Government of Canada, Taverner's *Birds of Canada* issued in 1925 and Earl Godfrey's issued in 1966. *The Wild Flowers of B.C.* by Lewis Clark has beautiful illustrations; and a fascinating book on geology was given to us by George Winkler, the prospector and writer, called *The Earth Beneath Us*.

Poems

By Catherine Stewart

West Coast Winter

Sand like glass and salal fringed cliffs held together by a drizzle of mist.

Adrift

A big, black log bravely boating tosses on the greyness of a cranky, winter ocean.

But where is its rudder? Where its mast?

Only a rough, round keel ever rolling, guides it.

Thus up and down and up and down, licked by the froth's salty tongue, it assuredly advances shoreward.



THIMBLE FARMS

Bedding plants — Hanging baskets
Shrubs & ground covers
and fruit trees.

RR1 Arbutus Rd., Southby Pt. 537-5788 Salt Spring Island

Growing Native???

10% off native plants to VNHS members

Classified Advertising

is available for V.N.H.S. Members at \$5 per ad. Write your own ad — it will appear exactly as you submit it. Text only (no graphics or photos).

Limit 35 words.

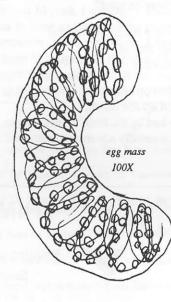
The Life of a Mosquito

By Molly Turner, Age 10

hen you are out walking this spring, stop and take a look at any pond or water-filled ditch. Chances are, you'll see many tiny "wrigglers", or mosquito larvae.

The mosquito lays her egg mass in a tight spiral, floating at or near the surface of any pond, lake or ditch. The egg mass, up to 10 mm long, is curved at first, so that it looks a bit like a peanut out of its shell. Later on, the spiral spreads out, and the eggs begin to turn into tiny mosquito larvae. Still in their egg mass, they start to behave like baby tadpoles just before they have hatched, wiggling about at the slightest disturbance in the water. In a day or two, they will hatch. Less than 1 mm long and visible easily only under a dissecting microscope, they wiggle free from their bindings. The little mosquito larvae are very vulnerable to the predators of the pond, and during the first week many will be eaten.

As they grow older, the larvae become darker and more visible. Their tails are jointed, something like a lobster's tail, and their heads are quite big. The young mosquito larvae have many dangers to face, for they aren't camouflaged and they don't have any protection. They must rely on their speed. They must be constantly moving to keep away from the predators. They are nicknamed "wrigglers" because of the way they move. They slash their tails back and



forth, giving them a look like a piece of elastic being waved back and forth.

Although many eggs are laid, only a few larvae survive to become adult mosquitoes. A few months after the eggs are laid, the larvae emerge from their larval shell and fly away. The male adults are harmless, for they do not bite, but eat flower nectar and other foods. It is the females that you always find sucking your blood. They need the nourishment of blood in order to develop eggs and create more mosquitoes.

Mosquitoes can grow in just about any body of fresh water that the female can lay her eggs in. Even an old dishpan left outdoors and filled with rainwater can be used. Mosquitoes may seem to be pests, but they are a very important part of the natural food chain. The larvae are eaten by caddis—fly larvae, tiger beetle larvae and other creatures. The adults are a major food for swallows, wrens and other insect—eating birds around ponds and lakes.

Mitlenatch Island Park Volunteer Warden Program

1989 Mid-June to end of August

This is a unique experience for naturalists to be volunteer wardens on Mitlenatch. Enjoy the sights and sounds for seven days.

There is a bird blind overlooking one of the Glaucous-winged Gull colonies, and Black Oystercatchers forage the beach for food for their chick(s). Pigeon Guillemot fly to and fro when feeding young and gather on stumps or rocks to serenade the island. Flowering plants are there to discover – at the right time, of course.

Return transportation to Mitlenatch from Saratoga Beach, Vancouver Island, provided by the B.C. Parks Branch (Miracle Beach).

Duties are:

- 1. direct visitors to points of interest;
- 2. caution visitors to stay out of the nesting colonies;
- 3. keep a record of the number of visitors.

Your preparation: be self-sufficient re food, bedding, and water (there's some help with the last).

Interested persons should contact:

Doug Innes 2267 Stewart Ave. Courtenay, B.C. V9N 3J1 phone: 338-0206

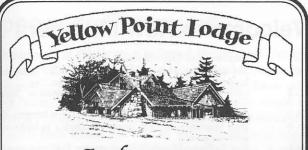
Interested in Joining the Juniors?

Some parents may have heard that the Juniors Section of the Victoria Natural History Society is starting up again. The Juniors will be receiving *The Victoria Naturalist*, having special meetings and field trips. The membership fee for Junior subscribers is \$3.00. For more information, please phone Tom Williams at 595–4281 after school.

Federation of B.C. Naturalists 1989 General Meeting

Thursday, May 4 – Sunday, May 7, 1989 at the University of Victoria

-don't forget to register
phone Margaret MacKenzie-Grieve at: 477-2402



A place apart...

- ~ 180 acres of natural, oceanfront parkland.
- Relaxed country hospitality.
- ~ Fine home cooking.
- ~ Beach sauna and hot tub.
- ~ Salt water swimming pool.
- ~ 5 miles of walking and jogging trails.
- ~ Tennis courts, volleyball, badminton, canoes, row boats, ping-pong.
- 1 mile of waterfront with secluded coves and beaches.



R.R.#3, Ladysmith, B.C. VOR 2E0 604 • 245 • 7422

Cadboro Bay SHOP EASY

100% locally owned and operated

3829 Cadboro Bay Victoria, B.C., V8N 4G1

Telephone: 477-6513

Birder's Nights Move

Birder's Nights have proved to be so popular that we've outgrown the available room at the Swan Lake Nature House. The Birder's Committee is looking for available meeting space at UVIC. Phone the Victoria Natural History Society's Events tape at 479–2054 for the building and room number.

Wildlife at School

By A.R. Davidson

There was certainly something going on at the Norfolk House School on Maddison Avenue at a quarter to two in the morning of January 19. Our friends who live opposite were wakened by a series of cries, growls, hoots and noises they couldn't describe. As sleep was impossible, they roused themselves and looked out of the window, and there they saw two huge owls the size of turkeys, sitting on a solitary cotton-wood tree and very visible in the moonlight. Just a pair of courting Great Horned Owls, but what a noise they could make in the middle of the night—and it's certainly no place for owls to nest, in that complex of school buildings. The chorus went on for a considerable time, but finally ceased with a few wailing cries as they flew away. So sleep was possible once again.

Parks and Conservation Committee Report

The committee has established a series of district guardians to act as watchdogs for environmental problems or threats to natural areas in Greater Victoria. The guardians are busy getting familiar with local councils, parks committees and community and neighbourhood plans so that they can be better prepared when advocating protection of our local environment. They are also preparing priorities for their districts in terms of issues and areas that require protection. These priorities will form the basis of our plan of what we would like to see happen in the region.

Here is a list of the volunteer guardians thus far:

North Saanich/Sydney	Gladys & Gerry Anderson	656–9599
Central Saanich	Bruce Whittington	652-1529
Saanich	Wilf Medd	658-5829
	Lyndis Davis	477-9952
Oak Bay	Mary Morrison	598-4823
	Rosemary Partridge	598-8945
Victoria	Connie Hawley	385-2535
Capital Regional District	Joel Ussery	592-1356
Federal Lands	Bruce Whittington	652-1529
		The second second

If you have an idea for an environmental awareness project or know of environmental problems or threats to natural areas, please call the district guardian of that area. PLUS, we still need more volunteers; we currently have no district guardians for Esquimalt, Western Communities, Highlands, Sooke–Jordan River, or Provincial Parks. If you would like to volunteer, call me, Reuben Ware at 385–2803.

20

Birder's Night and Botany Night are for Beginners Too!

Recently comments have been overheard like "Oh, I'm just a beginner looking at local wildflowers so I haven't gone to any of the Botany Nights," and "I'm not good enough to go to Birder's Night yet." Nothing could be further from the truth. Both Birder's Nights and Botany Nights welcome beginners. In fact, there are often sections of the evenings included for just these people. Botany Nights and Birder's Nights are open to every society member, professional, amateur, old pro and beginner.

Botany Nights are usually held on the third Tuesday of the month at the classroom of the RBCM. Meet at the front door at 7:30 p.m. They are under the capable leadership of Adolf and Oluna Ceska. Birder's Nights are the fourth Wednesday of each month. Birder's Night is proving so popular that we've outgrown the space available at Swan Lake, and we are planning to move to UVIC. Phone the tape recording at 479-2054 for the location. Mike McGrenere and Bryan Gates look after organizing the program for these nights. The meetings are always informal and information packed and often present programs with local or visiting experts.



ROYAL BRITISH COLUMBIA MUSEUM PUBLICATIONS:

***CONTRIBUTIONS TO NATURAL SCIENCE**

***CULTURAL RECOVERY PAPERS**

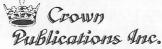
*HERITAGE RECORDS

We carry Ministry publications on Forestry, Mining, Environment and many others. As well we are the exclusive distributor of all B.C. legislation.

All this and much more is available in our new and attractive store located right downtown.

For the convenience of our customers, orders for publications are accepted by telephone or mail with pre-payment by cheque, VISA or MASTERCARD.

Stop in today and browse through our large selection of titles. Call or write for our free catalogue.



(formerly the Queen's Printer Publications) 546 Yates Street Victoria, B.C., V8W 1K8 TEL: (604) 386-4636 FAX: (604) 386-0221

Welcome to New Members

Dec. 1 Patti Parish, of Taylor Street

Dec. 1

Jim and Betty Mundy, of St. David Street. Interested in

botany and birding, and helpers in bluebird banding.
Colleen Bryden, of Glasgow Ave. Particular Interests:
Birdwatching; Wildlife Viewing. Dec. 2

Dec. 2 Bill Munro, of Craigmillar Avenue. Particular Interest: Birds. John Shaneman, of Fifth Street. Interested in birdwatching Dec. 6

Dec. 6 Enid L. Ford, of Beach Drive. Interests: field trips, especially if farther afield than local; marine biology and all nature; over-

Dec. 6 Dr. Ian McTaggart-Cowan, of Woodhaven Terrace. Particular Interests: Birds and Mammals; Marine Mollusca.

Dec. 11 Rory Cook, of Larchwood Drive. A Scholarship winner. Dec. 11 Bronwen Lewis, of Oliver Street. Another Scholarship win-

Dec. 12 Maud Vant, of Parksville. Interested in the preservation of all wildlife on this planet, and in letting politicians know about the ecological dangers to this planet and themselves.

Dec. 13 Peter and Erika Noack, of Robinwood Drive. Particular Inter-

Dec. 14 Bette Cochran, of Westdowne Road. Interested in birds and

Dec. 15 M.B. "Pat" Steele, of Sidney. Particular Interests: Birds;

Dec. 19 Florence McLean, of Graham Street.

Dec. 19 Mrs. M. Marshall, of Foster Street. Interested in Birding.

Marie E. Pym, of Beaumont Avenue. Particular Interest: B.C. Dec. 20

Dec. 28 Colleen Stirling, of Sidney.

The J. and M. Phillips Family, of Oliver Street. Particular

Dec. 29

Dec. 29 Colleen O'Brien, of Palmer Road. Looking forward to receiving our publications and news of upcoming meetings and

Jan. 1 Barbara A. Lund, of Allenby Street.

R.H. Thompson, of Windsor Road. Particular Interests: Jan. 1

Birds; Photography.

Marilyn Miller, of Wilkinson Road. Interests: Birdwatching; Jan. 5 preservation of local natural areas and trails, especially in rural

Jan. 9 Maureen Burke, of Windermere Place. Welcome back!

Jan. 10 Jacqueline Armstrong, of Esther Place.

R. Wayne Campbell, of the Royal B.C. Museum. Interests: Jan. 10 Birds, Conservation, Naturalist Research.

Jan. 10 Ken Bowen, of St. Charles Street. Interests: Wildlife Photography; Birds and Mammals.

Jan. 10 Len and Jean Baskin, of Begbie Street.

Jan. 10 Doreen Marsh Piddington, of Major Road.

Jan. 11 Marjorie Griffin, of Belmont Avenue.

Jan. 11 Patricia McNamee, of Dallas Road. Particularly interested in

Jan. 11 Ben Fuller, of Esquimalt Road.

Jan. 12 Brenda Gerth, of San Juan Avenue.

Graham Gillespie, of Nanaimo. Interested in Birding, Fish Jan. 16

Biology, Nature Field Trips. Jan. 17 Mark Yunker and Janet Erasmus, of Brentwood Bay. Both interested in Birding, Natural History, Photography. Mark

likes Underwater Photography.

Etta Connor, of Catalina Terrace. Wants to hear about birding Jan. 17

Jan. 20 Doris Bate, of Moore Place. Recently from Ontario. Likes

Jan. 20 Robert E. Robinson, of Sidney. A Christmas Bird Count par-

James and Edna Megson, of St. Charles Street. Particularly Jan. 23 interested in Birdwatching

Upcoming Programs

Please meet at the location indicated for each trip. For field trips BRING A LUNCH and be equipped for changes in the weather. Always phone the VNHS Event Tape (479-2054) before a trip you plan to take in order to obtain full particulars or details about changes (sometimes unavoidable) that have been made. On VNHS trips, participants usually pool vehicles to reduce parking problems and costs. A considerable fuel bill can be run up on a trip, consuming 5 to 10 cents a km. The Board suggests that these costs be shared with the driver. Contact Lyndis Davis at 477-9952 if you want to borrow the Society scope for a scheduled trip.

If you would like to lead a field trip or have an idea for a program or club activity, please phone Dave Fraser at 479-0016.

MARCH PROGRAMS

Saturday, March 11. Birding Trip to the north end of Elk Lake and Batu Rd., with Brent Diakow. Meet at 9:00 a.m. at the bathing beach parking lot off Brookleigh Rd.

Tuesday, March 14. In Pursuit of California Wildflowers with Dr. Gerry Allen. Begbie Building 159, University of Victoria, Free, Follows our Annual General Meeting, 8:00

Thursday, March 16. Capital City Forest and Green Belt, with Dr. Robert G. McMinn. Slide show and talk. Fisher Building, Camosun College, Lansdowne College Campus. Parking lot is off Lansdowne Rd, between Foul Bay and Rich-

Saturday, March 18. Nature Ramble around Newcastle Island, Nanaimo, with Bill Merilees. Catch the 10:00 a.m. ferry from Nanaimo to Newcastle Island. Meet at the Helmcken Park & Ride at 8:00 a.m. or at the ferry jetty at the north side of the Hockey Rink in Nanaimo at Maaseo Sutton Park. Walk to the ferry from the parking lot. Ferry cost is about \$3.00 round trip. Phone Lyndis Davis (477-9952) to arrange car pool and for more information.

Sunday, March 19. Ecology Walk at the Old Gardens at the Saanichton Plant Quarantine Station (Experimental Farm). Come take a stroll through these beautiful—if neglected-old gardens. Meet at gate and parking lot on East Saanich Rd. at 1:30 p.m.

Tuesday, March 21. Botany Night at the RBCM classroom. Meet at 7:30 p.m. at the Royal British Columbia Museum's front door.

Wednesday, March 22. Birder's night, 7:30 p.m. Speaker: Marjorie Bousfield, an illustrated talk on "Snow Geese, the Canadian-Soviet Connection." Phone the Victoria Natural History Society's Events Tape for a location (479-2054). Bring a friend.

APRIL PROGRAMS

Saturday, April 8. Birding trip by boat around Sidney Spit and Mandarte Island. Meet at the Sidney Island Ferry Dock, Sidney, at 9:00 a.m. Dock is one block north of the foot of Beacon Avenue, Sidney; turn left at the new Whale Museum. Cost \$10:00. Back to Sidney around noon. Migrating Brant, nesting gulls and courting cormorants are likely highlights of this trip. Space is limited, so phone Lyndis Davis at 477-9952 or David Fraser at 479-0016 to reserve a space.

Tuesday, April 11. Dinosaurs of British Columbia, with Rick Kool. Begbie Building 159. University of Victoria. Free.

Saturday, April 15. Field Trip to see the Pink Lilies, with Leon Pavlick. Phone the Society Event Tape (479-2054) to see if there is an announcement on the field trip due to the season. Meet at Helmcken Park and Ride at 9:00 a.m. or at the viewpoint at the Pink Easter Lilies at Sutton Creek, Honeymoon Bay Wildflower Reserve, at 9:30 a.m.

Tuesday, April 18. Botany Night. RBCM classroom; meet at 7:30 p.m. at the front doors of the Royal British Columbia

Thursday, April 20. Central America and Patagonia, 1989 Spring Expedition, with Dr. Joyce G. Clearihue. Slide show and talk. Fisher Building, Camosun College, Lansdowne College Campus. Parking lot is off Lansdowne Rd. between Foul Bay and Richmond Ave.

Wednesday, April 26. Birder's Night. 7:30 p.m. Phone the Victoria Natural History Society's Events Tape for a location (479-2054). Bring a friend.

Saturday, April 29. Birding trip to Calvert's Property at 4373 Prospect Lake Rd. Leaders Lyndis Davis and Giff Calvert. Meet at Prospect Lake Park off West Saanich Rd at 9:00 a.m. to carpool, as parking is limited at the Calverts'.

SOME UPCOMING PROGRAMS

Tuesday, May 8. Gardening for Wildlife, with Tracy Hooper, Begbie Building 159, University of Victoria, Free.

Expert Service & Repairs

Binoculars **Telescopes** Microscopes



30 yrs. exp.

Michael Kamsteeg 1073 Glen Forest Way 474-4482 (afternoons)

pickup and delivery available.



P.O. Box 5220, Stn. B Victoria, B.C. V8R 6N4

> Miss Margaret Turner 201-548 Dallas Road VICTORIA, B C V8V 1B3

The Birds of British Columbia

Volume I, Parts 1 and 2: Introduction, Ornithological History, The Environment and Species Accounts—Loons through Woodpeckers

by R. WAYNE CAMPBELL, NEIL K. DAWE, IAN McTAGGART-COWAN, JOHN M. COOPER, GARY W. KAISER, and MICHAEL C. E. McNALL

Published by the Royal British Columbia Museum, Victoria, B.C., Canada in cooperation with the Canadian Wildlife Service

This long-awaited treatment of the Province's birds will be the standard, indispensable reference for decades to come. Seasonal status, habitat preferences, migration patterns, breeding biology, and a wealth of other life-history information are discussed for the 266 species recorded. Coloured maps illustrate the distribution and status of each species. The authors examined over a million records from both historical and modern sources, representing the efforts of over 4,000 contributors. Introductory chapters outline ornithological history, conservation and management activities, and the environment. Included are hundreds of tables, graphs, maps, and black-and-white photographs of birds and their habitats.

PRE-PUBLICATION SALE

In order to finance the printing of this large and important work, a prepublication sale is underway. Until June 30, 1989, the two hardcover books comprising Volume I will be sold at \$49.95 for the set; after this, the price will be \$59.95. Publication will be in mid-1989. Volume II (Perching Birds) is scheduled for publication in mid-1992; the price is yet to be determined.

Those ordering at the pre-publication price will receive, by return mail, a card describing the book. This card acts as a receipt and can also serve as an attractive announcement to the recipient if the books are to be given as gifts. As soon as the books are printed, they will be shipped to the purchaser.

Volume I, two book set, approx. 1000 pages in total; illustrated, $9''\times12''$ hardcover \$49.95 CAN pre-publication.

Please send orders with pre-payment to: Birds of B.C., c/o Jennifer Buscall, Friends of the Royal B.C. Museum, 675 Belleville St., Victoria, B.C., Canada V8V 1X4... Include \$2.00 for handling. VISA and Mastercard are welcome; please include number and expiry date.