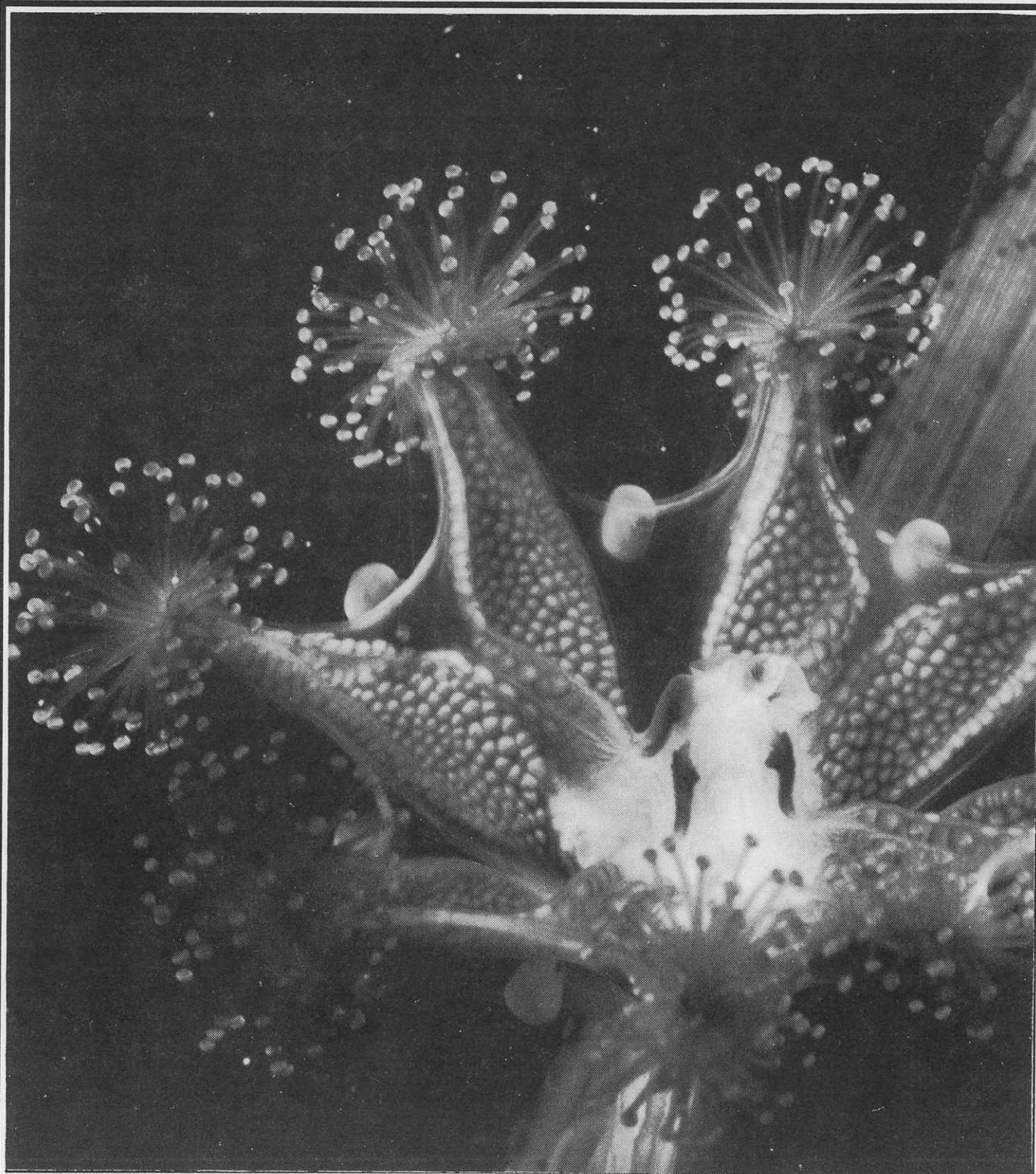




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The Victoria NATURALIST

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OUR COVER

This month's cover is a photograph of *Haliclystus stejnegeri*, a sessile or fixed jellyfish. While related to the large Scyphozoan jellyfish often seen pulsating in coastal waters, *Haliclystus* has lost almost all power of motion. It attaches to eelgrass stalks and feeds by means of stinging cells located at the tips of the eight marginal lobes. The animal is not large (about an inch in diameter), and the greenish yellow colours are not striking, but a careful look in eelgrass beds should produce results. The photo is from the library of the Royal British Columbia Museum and was taken by Phil Lambert, Head of the Invertebrate Unit. Readers can find out more about eelgrass and the many animals which are associated with this very important marine habitat in this month's *Pacific Octopus* by Lynton Burger.

CORRECTION:

In Jim Barwise's article on Wildlife Recovery, published in the July-August, 1994 issue of the *Victoria Naturalist*, a paragraph on dealing with wildlife road casualties got left out during typing. With a large mammal, use a strong stick to move it to the side of the road and cover it with a blanket. They can bite if handled. With a smaller mammal, you may be able to put a pad of some kind against them to stop the bleeding, then put them in a cardboard box with a covered hot water bottle. With birds, put them in a box on a blanket. Keep them warm and quiet but do not offer them any liquids. It can be too stressful. If they recover in a couple of hours you can release them where they were found. With all wildlife, don't try and guess what to do - contact someone who knows, quickly.



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Some Tragedies of Garry Oak

by Leon E. Pavlick

In the *Journal Kept By David Douglas During His Travels In North America, 1823-1827* (first published in 1914), is a description of *Quercus garryana* (Garry Oak). A note from the editor of the published version indicates that the description of this species seems to have been added by Douglas at a later date, after his journey to North-west America. Douglas first collected this oak in 1825, on the lower Columbia River. He noted that the oaks here were "generally low and scrubby" but that sometimes they attained a height of 70 feet; and that they do not form thick woods but are "interspersed over the country in an open manner, forming belts or clumps along the tributaries of the larger streams..." Also noted was that the oak was used for building part of the Fur Company's (i.e., Hudson's Bay Company's) apartments. Douglas predicted that "for various domestic purposes the wood of the tree will be of great advantage, more especially in shipbuilding".

David Douglas was born at Scone, Perthshire, Scotland, the son of John Douglas and Jean Drummond. After serving as

an apprentice gardener, and attending lectures in botany at Glasgow University, he was appointed a botanical collector for the Horticultural Society of London. He collected in the United States, Upper Canada and, on two separate trips, in the Pacific Northwest. He collected Garry Oak on his first trip; on his second trip, in 1830, he spent 19 months in California. During this second trip, after abandoning an attempt to return home by way of Sitka and Russia, he narrowly escaped drowning in the Fort George Canyon on the Fraser River. He lost his canoe, notes and equipment.

Thereafter, he sailed for Honolulu en route for England. While on a mountain-climbing expedition on the island of Hawaii he fell into a bullock pit and was gored to death by a trapped bullock; some believe that he was the victim of foul play. David Douglas had collected many species of plants in North America which were before unknown to science. One honour which came his way was to have the Douglas Fir named for him.

In his account of *Quercus garryana* (Garry Oak), Douglas stated that "I have great pleasure in dedicating this species to N. Garry, Esq., Deputy Governor of the Hudson's Bay Company, as a sincere though simple token of regard". The said Nicholas Garry was born in England in 1781 or 1782, the illegitimate son of Nicholas Langley and Isabella Garry. He was brought up by his uncle, Thomas Langley, who became a director of the Hudson's Bay Company in 1807; in 1817 Nicholas Garry also became a director of that company.

In 1821 he was selected to visit Canada to oversee the amalgamation of the Hudson's Bay Company with the North West Company and from 1822-1835 he was deputy-governor of that company. Fort Garry, a Hudson's Bay Company post at the present site of Winnipeg, was also named in his honour. In 1835 he became of unsound mind and his affairs were administered by the master in chancery from about 1839 until his death at Claygate, Surrey, England in 1856.

David Douglas, having died an untimely death, was not able to publish the description and name he had given to Garry Oak. The name, *Quercus garryana*, might have quietly passed into the dustbin of history except that it was accepted by Sir William Jackson Hooker who had many titles, including: Regius Professor of Botany, Glasgow, 1820; Fellow of the Linnean Society, 1806; Fellow of the Royal Society, 1812; LL.D., Glasgow; D.C.L. of Oxford, 1845; Knight of Hanover, 1836; and, Director, Royal Gardens, Kew, 1841-1865. He was also a great friend and patron of Douglas.

In 1840 Hooker published Douglas' name, *Quercus garryana*, in his *Flora Boreali-Americana*, thus establishing it as the only legitimate name for that species. In his account, Hooker cited other specimens of Garry Oak, as well as that of Douglas', and again noted that the wood was good and well adapted for ship-building. After a long and brilliant career, Hooker, aged 80, died at Kew of a disease of the throat, then epidemic there.

In 1842 Governor George Simpson of the Hudson's Bay Company was unhappy with Fort Vancouver on the Columbia River as the centre of the Company's Pacific operations. He saw its limitations and became convinced that the southern end of Vancouver Island would provide the best situation for a new establishment; Chief Factor James Douglas was sent there from Fort Vancouver to report on a location for a new depot.



Garry Oak (*Quercus garryana*) seedling (photo: Nan Archibald).

Among other things, James Douglas reported back that Camosun (Victoria Harbour) had an abundance of valuable oak and pine timber and had a range of plains required for tillage and pasture. Douglas found open country extending inland for six miles behind Port Camosun. Douglas found the vegetation most luxuriant with the wild clover knee-deep and the native grasses and ferns rising to shoulder height, providing evidence of a rich productive soil. In 1843 construction of the trading post began; the next year Roderick Finlayson, clerk, was put in charge of operations and fashioned crude ploughs and harrows out of oak and broke some land.

Americans moving into Oregon over the Oregon Trail and settling the Willamette Valley had no particular reason to honour Nicholas Garry. To them *Quercus garryana* became Oregon Oak or Oregon White Oak. Then in 1846, the Oregon Treaty between Great Britain and the United States accepted the 49th parallel as the dividing line between British and American territory west of the Rocky Mountains and Vancouver Island was recognized as a British possession. The Hudson's Bay Company, in the process of shifting its operations to Fort Victoria, successfully applied to the British government in 1848 for a grant of the Vancouver Island and made a decision to establish a colony of British settlers there.

In 1851 Douglas became Vancouver Island's second Governor and went on to become Governor of British Columbia. In 1863 he was created a Knight Commander of the Bath; he retired from government the next year, withdrew to private life and, at almost age 74, died at Victoria in 1877.

In the 151 years since James Douglas founded the trading post at Victoria, the mild, equable climate and, in no small part,

the pleasant oak landscape of southern Vancouver Island, has attracted and held an increasingly larger population. In the early days of colonization the oak forest was decimated to provide for farms, homes and businesses for a small population. For many decades much of the area around Victoria remained a pleasant pastoral landscape with large Garry Oak forests.

The population of southern Vancouver Island gradually increased, more rapidly in recent times, leading to the current trituration of the remaining Garry Oak stands by massive amounts of house construction, road construction, shopping mall construction and other projects. Private landowners hold much of the remaining large Garry Oaks and these are often surrounded by well-manicured lawns consisting of alien horticultural grasses rather than native Garry Oak meadow plants.

In much of the oak zone, regeneration of new Garry Oaks is not occurring. Forests on private holdings have been "sanitized" with the removal of fallen trees and snags. This may have been, in part, responsible for the disappearance from Vancouver Island of Lewis' Woodpecker which depended on snags for nesting sites. Many species of plants associated with the Garry Oak communities are imperilled, some near to being wiped out as Garry Oak meadows are replaced by asphalt, houses and lawns. One such species may be Lobb's Water-but-tercup; others heading that way include the Golden Indian-paintbrush, Howell's Triteleia, and Deltoid Balsamroot. Other species of animals are threatened, such as the rare Sharp-tailed Snake.

Recently, the alarm has been sounded and various organizations and individuals have been bringing the information forward that will allow for better management and preservation of the remnant oak communities of south-eastern Vancouver Island and the Gulf Islands. As a result of these efforts, the public is becoming more aware of what is being hazarded. Much work remains to be done in order to reverse the tragic decline of our banner tree and its associated ecosystems; honours can wait.

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Leon E. Pavlick is a curator with the botany department of the Royal British Columbia Museum. He has been a member of the Victoria Natural History Society since the early 1960s.

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Melanistic White Crow A Rarity

The photos shown below of a melanistic white crow were taken by Paul Paulsen of Chemainus, B.C. It has dark eyes and black wingtips. It isn't an albino, which is defined by all-white feathers and red eyes. Paul has been watching the all black male parent for five years and this past year it mated with a black female which had some



grey-white markings. However, this is the first white crow Paul, who has watched birds much of his life, has seen. He has collected some flight feathers of both the parents and the white youngster. He would be happy pass these along to anyone interested in his observations. Contact the *Victoria Naturalist* for further information.



Natural History Presentations

by Bev Glover

Oh September! The birds are migrating south. Mammals are preparing for the winter months ahead. Most plants have finished reproducing and have gone to seed. Most importantly, the Victoria Natural History Society's indoor programs and outdoor trips begin again after the summer hiatus. I invite all members to come and participate.

Botany Night and Birders Night return on the third Tuesday and fourth Wednesday, respectively, of each month. Check the calendar sections for times and locations. Adolf Ceska and Bryan Gates continue to sit at the helm of each of these projects.

Marilyn Lambert has assumed the duty of organizing field trips. Mike Ryan has taken over the task of the general meetings (second Tuesday of each month). These evenings have a new look and I would like to tell you more about them.

We have given the old General Meetings a new title. They are now the *Natural History Presentations*. Since there is very little real business to these meetings, except in the March Annual General Meeting, the old name seemed inappropriate. The *Natural History Presentations* is a speaker series on a diversity of topics. Birds and flowers are topics of the specialty meetings but there is far more to a well rounded natural history education. This is a chance to showcase other topics such as an unusual group of plant or animals, a country or ecosystem, important current affairs and the geology of our plant. Even if you feel you know nothing about the topic, do come. You will come away with some new knowledge; maybe a fledgling new passion; perhaps the door prize.

The opening presentation on September 13 is a special "welcome back" evening for members and the public. We will have several door prizes. Marilyn Lambert has donated a zodiac trip to the islands off of Oak Bay as one of the prizes. There will be a couple of short five-slide vignettes on what certain members of your board did on their summer holiday. Home baking will be a treat at the coffee table. Our feature speaker is Dr. Allan McGugan who will introduce you to the Geology of the Peace River Rockies. His talk includes some film. I know that when I go out looking at plants and animals, I always wish I knew more about the rocks and land forms upon which they live.

Last year's speaker series was excellent. Every speaker put a lot of work into their talks. Highlights included Rick West's fantastic photos of tarantulas. There was Dave Fraser's professional Goldstream Park Salmon audiovisual film. Lisa Kadonaga gave wonderful insights into what it was like working as a geographer in polar bear country. Those who attended Dave Nagorsen's bat talk came away with interesting information on these creatures. Costa Rica was the topic for the banquet. Sid Cannings is always a welcomed speaker. Members who heard Steve Pridgeon's talk, learned about Fred the roadrunner. They even know how to find Fred if they visit Lake Mead. Finally, Job Kuite not only discussed some very bizarre South American plants but also related some tales of travelling in South American that would make one appreciate the Colwood Crawl.

If you missed these talks, be sure to attend our new series this year. Bring *friends*, a coffee mug and an inquisitive mind.

Bev Glover is chair the Victoria Natural History Society's Publicity Committee.

FOR THE JUNIOR NATURALIST—

Flying High

by Peggy Price

He sat on a lichen covered rock, dozing in the northern sunlight. Tad was a young Arctic Tern. He had just finished a heavy meal and was feeling quite drowsy. He knew it was important to be in prime condition for the Long Flight and he had taken advantage of the plentiful supply of small fish which he knew would build up his fat reserves and strengthen his flight muscles for the stressful days ahead.

While he did not think of distance in the way that humans do, he knew the Long Flight would test all his resources as he flew those thousands of miles to reach the Antarctic. There he would spend the winter and then return again to Canada's Arctic, a round trip of twenty-two thousand miles. He would return to long days of sunshine and a generous food supply which would enable his mate and himself to raise their family.

He knew this was the way his ancestors had taken for thousands of years—their flight plans were filed in his genes, so that the thought of making other plans for the winter just never entered his head.

But, as he sat relaxed and comfortable, strange thoughts began to drift through his mind. "What if...but no...it was always this way" he told himself. Again, the persistent "What if..." kept invading his thoughts and he found himself considering other migration routes. "What if..." he thought again, "...instead of going southward over the surface of the earth, what if I flew this same distance straight up into the sky?"

He idly considered this for a time, wondering what he would find if he flew away from the earth. The thought of this new adventure became overpowering and he suddenly soared upward into the clear Arctic sky—higher and higher, with a sense of exhilaration he had never felt before.

Tad felt no fear as the blue earth receded in the distance. Even as the sky grew darker, he was still filled with excitement and anticipation. The familiar stars were there, stars which had guided him each year on his journey south. The farther he flew from earth, the brighter they shone and a velvety blackness surrounded him.

He was overwhelmed by the beauty spread out before him. He flew for days, passing by star clusters and clouds of nebulous star dust which glistened against the blackness. He saw glowing nebulas of strange shapes and colours. He was still within the Milky Way galaxy, with its billions of stars, each one a sun, each capable of creating its own planetary system.

A warm star came into view and Tad was drawn towards

it. As he flew closer, he could see that a number of planets were orbiting the glowing orb. Closer still, he looked down upon a beautiful blue and white sphere which so resembled the earth that he felt quite homesick.

Although hesitant, he felt an overwhelming desire to see more and reduced his altitude. He found himself gliding over a clear blue ocean - he came lower and could see huge whales feeding in the turquoise depths while dolphins played in the sun dappled waters.

The golden sand along the shoreline was edged with groups of large rocks. Perched upon these a number of birds were resting quietly, their feathers ruffling in the ocean breeze. Tad settled down next to a group of sea birds, some of whom were terns like himself.

They greeted him in a friendly fashion and looked him over with interest. "Welcome..." said a handsome young tern pleasantly, "...have you come far?"

"Yes I have" said Tad, his voice husky from weariness "...I have come from far, far away. I have flown many days and have seen wondrous things."

"I am sure you are tired and hungry", said his new friend. "My name is Terra. Let me show you where you can find food." With this, he flew down into the lagoon, with Tad following. Here there was an abundant supply of tiny fish, which soon restored Tad's depleted energy. He settled back on the rock, next to his new friend, and fell asleep.

When he awoke, Terra was not there. "Come on up!" said a voice from above him. Tad looked up and then soared into the sky to join Terra who had been gliding slowly in circles, waiting for him to wake up.

"You say you have come from far away—did you come from the

snowy lands?" asked Terra, as they circled in the tropical sunlight.

Tad knew his new friend would find it hard to understand the distance he had come, so he just agreed. "Yes, I came from a land where it snows. The days turn dark and cold in winter, so we usually leave it until the sun returns and the flowers of the tundra bloom again. We have done this for thousands of years."

"Would you like to see our part of the world?" asked Terra, as they soared in unison. "Oh yes!" Tad said enthusiastically, "I should love to explore it with you."

Terra led them over rich green forests and silvery rivers. They flew for miles, sometimes swooping low over the treetop to take a closer look at the colourful birds which sang in the forest canopy. "This is wonderful..." Tad shouted, "...I didn't know there were places like this left. On my last migration south I flew through clouds of smoke for many miles, for humans have been cutting and burning these beautiful forests and it makes me sad."

Terra looked at him in horror. "Destroying the forests?" he cried "...why, humans here are very careful of the forest. They know their lives depend upon the oxygen the forests create."



Arctic Tern (photo: Peggy Price)



"The Snowy Lands" (photo: Peggy Price).

They respect the forest, and all the life it contains, and recognize the benefits which may yet come from its wide diversity. If it is necessary for them to cut a tree, they take it in such a manner that the other life systems are not destroyed. Then they restore the land to what it was, always respecting the those complex symbiotic systems that have taken thousands of years to develop."

Tad shook his head in disbelief. "This sounds like such a wonderful place. Where I have come from many creatures are in fear of their lives because of the destructive actions of humans. Why, just last year, some migrating birds ran into huge billowing clouds of burning smoke from oil wells which were set on fire in some dispute. Many were overcome and died as they flew, falling to the burning oil-soaked land below. This went on for months. Even the ocean was burning—many animals and birds lost their lives. Then, in another part of the world, close to the snowy lands, a huge ship filled with oil struck a rock and the oil leaked into the ocean. It coated the water and shores for miles and miles and many animals and birds died" sea otters, water fowl, fish—all died in the leaking oil."

Terra sat silent, still trying to picture the horrors which his friend had described. "I am trying to remember..." he spoke quietly "...some of the ancient ones, who have had our history passed down to them, speak of similar times on this planet, many thousands of years ago. We had thought these stories were myths—such things just could not have happened because humans are the most intelligent form of life on our planet."

Tad laughed. "Oh yes, these things can happen, and are happening!" he declared emphatically. "Why, now the ozone layer, which protects us, is thinning because of a build up of human pollution in the atmosphere. They know this is happening but few real attempts are made to correct the problem. Now

they are worried that the planet is warming up. This will cause problems for us all. Some birds on the Pacific islands have seen their young ones starve as the food supply they have used for years is suddenly gone."

"Yes, our myths speak of this as well" said Terra. "It is said that the planet was on the verge of collapse, that humans were increasing in number beyond the capacity of the planet to sustain them. All other life forms were threatened by the spread of humans - water and air polluted, forests destroyed, song birds disappearing, the air and water hardly fit to use."

"Then, a wonderful thing happened. As the planet struggled to survive against the onslaught, a marvellous change in human thought took place. Humans began to realize what they were losing. They began to see that they were destroying this wonderful planet" their only home—which was designed to sustain them indefinitely."

Terra spoke in a quiet voice. "A sense of wonder developed, as science and the world's religions joined to expose the exquisite complexity and beauty of the world. The darker side of human nature, which had ruled for so thoughtlessly for so many years, gradually changed. Humans understood at last that they were one family, on a small but miraculous planet, in an immense and mysterious universe."

"The myths say..." he continued "...that from that time, human intelligence was directed to repairing the damage that had been done and they used this intelligence to bring the planet back to the healthy and self-regulating system it once was. They realized their home was finite—that there was a limit to human expansion—and that other lives had a right to exist. They discovered the healing power of the natural world. Over the centuries, the balance of nature was gradually restored and the planet became well again.

"These are the myths of the ancient ones..." Terra continued "...we don't know how they originated, for we have lived peaceably here for thousands of years. We do not fear humans, for they are not destructive. Rather, they respect us and seek to preserve the harmony of our world. But perhaps there is some truth in these stories, if the world you came from is in such a state."

"What a wonderful place" Tad mused. "I wish the humans from my world could visit this one and see there is another way to live."

After their long day of exploration both Tad and Terra were quite weary and returned to rest upon the warm golden sands. The sun slowly disappeared into the quiet ocean, casting a rosy glow over their feathers. It painted the landscape with warm hues which gradually darkened as the velvet tropic night enveloped them. Tad's eyes felt heavy and he fell into a restful sleep.

He awoke with a start to find himself back on the lichen covered rock he had left so long ago. He closed his eyes again, trying to orient himself, wondering if he had been dreaming. The events he had experienced seemed too real for a dream and yet here he was, back on the Arctic tundra!

He stood up, stretched, flapped his wings, and then began to preen himself. He felt quite dishevelled, as though he had been on a long journey. He tidied each feather slowly, pondering the events he still remembered so clearly.

His gaze dropped to his feet and then stopped abruptly—for there, upon his toes, were traces of golden sand...

Peggy Price is a frequent contributor to the Victoria Naturalist and is well known for her children's nature stories.

Olympic Vulture Study

The Hawk Migration Association of North America is studying the southward migration of Turkey Vultures from British Columbia to the United States. The study is particularly interested in flights *over water* in the Strait of Georgia, Juan de Fuca Strait and anywhere in Puget Sound. They are also interested in inland sightings of groups of vultures.

Hundreds (to over a thousand) of northwest vultures are involved in this dramatic migration. Last year, during three days in late September, 945 Turkey Vultures crossed Juan de Fuca Strait—and there were still a few hundred left on Vancouver Island. The group is interested in knowing whether there are other water routes taken and just how many vultures come across the Strait of Georgia as well as the different crossings along Juan de Fuca Strait.

Reports should include the number of individuals in each group, date and time, and weather conditions. Any additional information will also help better understand the movements of this important species (the janitorial duties alone are worth millions of dollars!!). Send information to Diann MacRae, Coordinator, Hawk Migration Association of British Columbia, 22622-53 Avenue S.E., Bothell, Washington, USA, 98021 (206-481-2797).

Are Jays Our Oaks Best Friends?

by Yorke Edwards

Today I found another oak in the garden. We are finding oak seedlings again after years of finding none, and again we remember that the summer after a winter invasion of Steller's jays is the only time we find little oaks in our flower beds.

These jays prefer coniferous forests and normally stay near them, so there are parts of Victoria where they are not seen for years, especially in places where oak meadows once held back the dark evergreens. Periodically, however, these jays take over the city right to its beaches. In our 15 years on McMicking Point we have enjoyed two autumn invasions, in 1984 and 1993.

Why do they invade? Probably because there is a good acorn crop. Like many trees that produce seeds eaten eagerly by animals, oaks have "good" acorn years when they make many acorns, and "bad" years when they make few, and this is the tree's strategy to ensure that some seeds are not eaten and may become trees as intended. For several years they save energy by producing few seeds, then produce a large crop which local animals cannot entirely eat. In this way more new trees are established than if the tree turned out a small and predictable crop each year.

From Vancouver Island south into Mexico, Steller's Jays love acorns and can enjoy a diet of nothing else while the supply lasts. They also have a habit of prolonging the acorn feast by hiding them when too full to eat more and they remember where many are hidden should they be needed on a future hungry day. One kind of hiding place is in the ground where the soil is loose.

As I walk among old oaks in Victoria I often wonder how many were planted by jays. Most of those trees were there long before houses and gardens invaded the oak meadows and acorns falling onto thick mats of grass would have little hope of becoming trees.

Studies of prairie edges on the Great Plains show that trees have trouble invading grasslands, in some cases because the soil is too dry but elsewhere for less obvious reasons. In moister areas like the tall grass prairie, trees can be quite happy if planted by people but only if they are taller than the grasses. That is why farm houses on the plains can have large and healthy evergreens forming shelter belts. But nature does not plant ready-grown trees and a tree seed falling onto meadow has little hope of first getting to the grounds, second getting into the ground and third getting enough light to grow when under a thick mat of dense grasses and herbs.

Jays have solved these problems for Vancouver Island oaks. They carry acorns away from competing parent trees and sometimes hide them in patches of loose soil, perhaps in an old ant hill, or long ago where an elk or cougar scuffed up the sod, or where a Salish woman dug out camas bulbs.

It seems that most of our ancient oaks are with us because jays planted acorns in the oak meadows as food caches and were never nearby again when hungry, just like they do now in our gardens. Jays have probably been the oaks' best friends for a very long time.

Yorke Edwards is past Director of the Royal British Columbia Museum and continues to be associated there on a volunteer basis. He has also been a contributor to the Victoria Naturalist (see March/April 1992 article on tropical birds in Victoria.)

Viaduct Flats: A Stitch In Time?

by Michael Carson

It has been quite a summer for Viaduct Flats, the flooded wetlands just south of the Horticulture Centre of the Pacific gardens and east of Interurban Road.

At least three pairs of Pied-billed Grebes produced over twenty offspring and delighted us with their calls; Sora and Virginia Rails slinked through the rushes; a family of Wood Ducks and another of Cinnamon Teal occasionally strayed from their refuge of reeds and grasses; a pair of Ring-necked Ducks and another of Ruddy Ducks resulted in rare breeding records for these species on Vancouver Island; and Osprey plucked sunfish (and bullfrogs?) from the water ... all this because of a newly-constructed (Beaver?) dam on the outlet creek from the wetlands.

Yet the Saanich Peninsula's newest, and now premier, lake-marshland habitat is on the verge of disappearing just as quickly as it appeared. The culprit is Purple Loosestrife, a herbaceous perennial of European origin, that threatens wetlands wherever it finds itself, because of its rapid spread (See the July-August, 1994 issue of the *Victoria Naturalist*). Only a few stems seem to have been noticed in the water last year, though clumps had been seen whilst in bloom (July-August) on Interurban Road. Downstream on Colquitz Creek it has been rampant for a few years.

This year some of us who visit the Flats regularly were stunned to see a mass of purple blooms at the northwest end of the lake in mid-July, with one to two thousand stalks as a conservative estimate. Seed production is prolific (a million or more annually from a mature plant) and even with only a small percentage germinating this can result in a hundred-fold expansion each year. With that perspective, loosestrife would have been completely beyond control in 1995, a purple death in store for the wetlands and its birdlife.

There is a chance, however, that all has not been lost. A number of concerned members of the Society responded to calls for help and provided canoes, boats and physical labour to remove most of the blooms before seed production reached a peak and to uproot the bulk of the stalks. For most, it meant giving up one or more weekend mornings, after a hard week at the office, in exchange for the pleasure of wading in knee-deep water interlaced with mats of rushes, trying to avoid the hot sun, hungry leeches and swimmer's itch. All told, over 60 person-hours were spent on, or in, the water removing the plant and transporting it to shore.

Doubtless, some loosestrife remains and the exercise will have to be repeated next year, but probably not to the same degree, and hopefully with the help of fresh faces and hands.

Regrettably, we have no photographs to illustrate the joys of this work. You simply had to be there to experience it! Bogart and Hepburn in *The African Queen* had nothing on Darren and Claudia, as their loosestrife-laden canoe slowly sank into the duckweed-covered waters of Lake Viaduct.

In the meantime, when you're next out at the Flats watching that Great Egret or Solitary Sandpiper, or even waiting for that elusive Garganey, you might just want to say a small "thank you" to the fourteen VNHS members who made it all possible:

Lyn Barnett, Doris Brix, Dannie Carsen, Michael Carson, Darren Copley, Tony Embleton, Tom Gillespie, Gordon Hart, Anne-Marie Hart, Patti Parish, Chris Sandham, Jeff Stone, Ellen Tremblay and Claudia Weiss.

Thanks are also due to Mike Leskiw, Larry Anderson and Jim Rogers of the Saanich Parks Department for providing waders, for arranging removal of all the plant debris to the dump, and for providing assistance in removing stalks from places inaccessible to us.

Michael Carson has been conducting birding surveys of a number of freshwater habitats in the Victoria area, most notably a year-long study of the bird life at Blenkinsop Lake (see the January-February, 1994 issue of the *Victoria Naturalist*).

Welcome To New Members

- June 30 Andy Blaine and Linda Cundiff, of First Street in Sidney.
- July 10 Martha Warnes, of Meares Street: is interested in everything under the sun.
- July 10 Ms. Oraya Sutabutr, of Somerset Street: enjoys bird watching, scuba diving and volunteer work.
- July 10 Linda Grimm, of Summit Avenue: devotes her time to saving greenspace within city areas for nature.
- July 12 Sean Mitchell, of Century Road: studies aquatic ecosystems, birds, fossils and the history of B.C.
- July 27 Duncan Payne and Joanna Kafarowski, of Metchosin Road: enjoy birding, hiking, botany and family activities.



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Sept. 16 - 25, 1994

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*Numerous items will be for sale by silent
auction, with bidding opening Saturday,
September 17th, 8:30 a.m.*

Donors include –

Artists: Robert Bateman, Sue Coleman, Morgan Warren, Richard Hunt, Diana Thompson, Sandra Ritter, Lissa Calvert, Mark Nyhof, Chris Walker, Marcia Stone, Dave Fraser, Helen Anderson, Dorset Norwich-Young, Helen Butler, Grant Fuller, Diane Firmer, Rosemary James Cross, Pauline Hemming, Tannis Warburton, Bev Glover, Helen Anderson and Bridie Rapson. Both original works and prints are being offered.

Carvers: Rose Leonard, Tim Hume, Don Knowles, Steve Madsen, G. Frank Bruce, Larry Booth, and John Tinker
Photographers: Bertha McHaffie Gow, Wolfgang Hackman, Helga Hall, Ken Bowen, Terry Siklenka, and Gordon Fenske.

Pottery: Pat Webber, Robin Righton, Sue Hara, and Arlene Mackenzie.

Some very unique items from Thimble Farms, Wild Bird Nature Shop, Dig This Garden Shop, Des Kennedy.

To round out the theme, a "nature photographic safari" is being offered by Wayne Maloff, David Allinson is offering a guided bird walk, and 'Coastal Connections' is donating a number of interpretive nature hikes.

*A raffle is also being held in conjunction
with the auction. Prizes include:*

- Robert Bateman book, "An Artist in Nature," containing an original signed sketch by the artist.
- A whale watching tour for two donated by Sea Coast Expeditions.
- Nikon Naturalist III, 7x35 binoculars donated by the Field Naturalist

Only 1250 tickets will be sold, with the draw being made on the final day of the auction, September 25th at 4:00 p.m.

8:30 a.m. to 4:00 p.m. weekdays
Friday and Saturdays, 8:30 a.m. to 8:30 p.m.
Entertainment and refreshments will be available.

**Admission by donation.
For further information, call
the Nature Sanctuary office at 479-0211.**

Hawk Versus Owl

by David Stirling

Although this episode did not take place in British Columbia the species' involved are B.C. birds. Both have been recorded, albeit rarely, in the Victoria area.

Last June, on my way to the American Birding Association convention in Minot, North Dakota, I took a roundabout route southeast from Winnipeg to the Lake of the Woods in order to reacquaint myself with the birds of the eastern woodlands such as the Chestnut sided and Mourning Warblers, Scarlet Tanagers and Whip-poor-wills. At South Junction, near the little town of Sprague, a young couple from Winnipeg who were banding Great Gray Owls informed me that they had seen a pair of these birds just over the border in Minnesota, only three kilometres away.

I drove south and parked beside the drainage ditch as instructed. As the highway verge was narrow I switched on my hazard lights before scanning the habitat that looked good –

**I noticed a hawk, wings pumping
for maximum speed, driving
straight for the pole. I expected
the intruder to veer up at the last
second and sheer off. Not so.**

dead Tamarack and Black Spruce standing in a large sedge meadow bordering an extensive tract of muskeg. It was about 8:00 p.m., the sun well up after a magnificent electrical storm had passed. Now everything – earth, trees and sky – was shining and bright.

A glance to my right revealed a Great Gray Owl perched on top of a wooden power pole, only 30 paces away. The owl seemed to be interested in my lights – perhaps it was the clicking sound (a new kind of vole?) not the lights themselves. While watching the owl moving and twisting its head around and up and down in the most intriguing manner I noticed a hawk, wings pumping for maximum speed, driving straight for the pole. I expected the intruder to veer up at the last second and sheer off. Not so. The raptor, a Broad-winged Hawk, extended its talons and hit the owl full tilt. The owl, knocked ace-over-apple-cart, cart-wheeled down almost to the ground before regaining its composure and flying into the understorey. Three downy feathers floated up in the stiff breeze. I felt somewhat responsible for the incident as the Great Gray, trying for a fix on the clicks, was perhaps not aware of the approaching danger. The owl did not appear again during my next hour in the vicinity.

The hawk no doubt was protecting its home range against competition from another predator. I wonder if it would have been so aggressive had its target been the much fiercer Great Horned Owl? The Great Gray, although huge, is just a wimp.

David Stirling has been an active member of the Victoria Natural History Society and contributor to the *Victoria Naturalist* for many years.

Birding In Britain

by Warren Drinnan

For those who enjoy birding in the rain I can recommend England during February and March. Only during the latter part of April did the sun show itself in any serious manner. Nevertheless, while birding was not the primary function of this trip, Lisa and I enjoyed getting about the back areas of the countryside while exploring its hundreds of villages, museums and churches.

As many of you know, the birding network is very strong; I can't think of another activity in which one can go to most any city, in virtually any country, and within a few phone calls link up with local enthusiasts. For us, it was the neighbour of the mechanic of the couple with whom we were exchanging houses. It turned out that he was the Secretary of the Stockport Birding Society (Stockport is a suburb of Manchester) and he invited us to one of their outings.

Bird trips are done a little differently in England. And in style. They charter a large "greyhound" style bus and some 30 to 40 people climb on board for the tour. On our first trip we arrived early at the Jolly Sailor Pub (6:45 a.m.) and selected the front seat of the bus so that we could enjoy the view. This turned out to be quite the breach in protocol as this seat was traditionally reserved for the tour leader. Everyone asked "Where's



Pennington Flash, watching a Black-faced bunting ([photo: Warren Drinnan]).

Charles?" as they climbed on board. Charles, who of course we didn't know, was quietly sitting behind us. He was very stoic about the faux pas and generously allowed us to remain where we were; he even insisted that we sit there on the next trip.

The bus allows one to see over the hedgerows and we got quite the travelogue from those sitting around us. In addition to wildlife we were treated with a history of the area and stories about the various estates and castles. I was kept busy writing down pages of "things to do" and "places to visit"; we received so much information that it would take a year to do everything that was recommended.

Our first bird trip was to Shropshire, a county of rolling hillsides near Wales. It is quite something to see a 45-seat passenger bus navigate through the narrow streets and tiny lanes of rural England. On several occasions we had to back up for some distance, either to turn around or to allow on-coming vehicles to pass. And more than once the driver went up lanes I would be reluctant to take the mini I was using.

At predetermined stops (and a couple of unscheduled ones as well) the bus would stop and everyone would hike about the area for one to two hours. The primary goal of that trip was to find the Hawfinch, an elusive finch, similar to our Evening Grosbeak. This was accomplished, along with other notable sightings such as the Dipper and Woodcock. The total for the day was 64 species, not bad for February.

The Stockport Birding Society organizes a trip every month and the cost is 8.00 or about \$16.00 per person, a heck of a deal for an all day guided tour! Our first trip was so rewarding that we went on two others — one to North Wales, in March, and one to Anglesey (Wales) in mid-April. Anglesey is considered one of the premier trips of the year and everyone was talking about it, even in February. You have to book early to ensure a seat on the bus.

I mistakenly thought that this interest in Anglesey was for the unique birding (cliffs with nesting Puffins and Murres and the Welsh Chough, a red-legged/red-billed crow) but we found out that it really was for the bakery at Beaumaris. This tiny village is inundated by members of the bird club each April. The entire coach empties and queues up outside the local bake shop purchasing EVERYTHING! There wasn't a vanilla slice, date bar or jelly doughnut left by the time the last birder entered the store. Sold out by 9:00 a.m.

By the April trip we had become good friends with several of the club members—they were like an extended family. There was Merlin who was an electronics engineer who didn't own a car—he went everywhere, even to Paris and Prague, on a "penny farthing" (you remember, the bicycle with the pedals on the four-foot diameter front wheel). Jean gave us a complete travelogue of each and every church and castle we drove by, Cynthia researched birding hot spots for us and Marian stopped by to give us maps and brochures of the Lake District and other areas of interest. But it was Dave, the club secretary, who made sure that everything worked out for us. He repeatedly called to make sure we were aware of "this bird sighting" or "that natural history event". Dave's hospitality, along with that of the other club members, was one of the highlights of our trip. Perhaps the VHNS should consider similar ventures, such as a trip to the Lower Mainland during migration.

While driving around England we referred often to a book picked up in Victoria called *Birdwatcher's Britain: The Unique Pocket Guide to Birdwatching Walks* (John Parslow, editor; Pan Books/Ordnance Survey, 1983). It proved to be a very handy guide for outlining places to visit in each of the counties. So, for example, if we happened to be in Cornwall or Devon we would look up the best birding walks for those areas. The book describes how to get to each spot, where to park, provides maps of the walk itself and comments on what may be seen during the different seasons. We were seldom disappointed and the only criticism I have of the book is that it was a 1983 edition. Over the eleven years since publication a number of the instructions, especially on access roads, were out of date and we sometimes had a little trouble navigating our way. Surprisingly, few English birders that I met were aware of the book but most of the places recommended by them were in it.

There were several well-known birding areas that I was aware of before leaving Canada, such as the wildfowl trusts at Slimbridge and Martin Mere. These are best visited during the winter months when large numbers of Bewick's and Whooper's Swans, Pink-footed, White-fronted geese, and the rare Bean Goose, along with a wide variety of ducks, are present. There must have been over 5000 geese at Slimbridge on our first trip in February but less than 100 were present by the end of March.

Bed and breakfast accommodation is the most economical, and often are the only, choice, especially in the smaller



Coach used by Stockport Birding Society (photo: Lisa Drinnan).

villages. The price and quality will vary (not always in synchrony) but we can highly recommend a B&B near Slimbridge (Claremont House in Dursley) which was very welcoming and comfortable and, incidentally, had a number of stain glass windows with bird themes. Another spot we visited was the Wayside B&B, in Bala, Gwynedd, Wales which was recommended by Margaret Mackenzie-Grieve (by the way Margaret, Maxine says hello!)—a very friendly spot that welcomes birders. Wales is the home of the Red Kite a magnificent chestnut and black bird the size of a Red-tail Hawk. The countryside here is much less congested than England and the moors are as fascinating and desolate as our own alpine meadows.

Twitichers, who are birders at stage eight of the seven stages of birdwatching, are a consequence of 60 million people stuffed into an island not that much larger than Vancouver Island. In other words, where we may have a few dozen people show up for a rarity, this is increased in England by an order of magnitude and then some. Dave of the Stockport Birding Society figured correctly that I might be interested in a Black-faced Bunting that had showed up at Pennington Flash, not twenty minutes from where we were staying. My first twitch. The bird was a first for England and only the fourth for Europe. It was supposed to be in southern China.

We went to search it out five days after the first report hit the airways but there still must have been fifty birders trying to get a glimpse of the bunting through a maze of shrubbery. According to the local naturalist, the morning after the bird was reported there were several hundred observers at daybreak and over 2000 came that day. The bird was mist-netted during a banding project which was the only reason it was identified. (Personally, even if it landed on my hand, I doubt that I would have recognized it as anything except a funny looking Reed Bunting.) The bird was visiting a feeding station with several other species including Greenfinch, Goldfinch, Brambling, Chaffinch and Reed Buntings and probably had been there all winter. There is still considerable controversy over its origins (was it an escaped cage bird?). Newspaper and birding

NEW CHECKLIST OF BIRDS

Hot off the press the 1994 edition of the *Checklist of Birds for Victoria and Southern Vancouver Island*.

Compiled by Bryan Gates and Keith Taylor, the pocket-size, 16-page booklet lists the 347 species that have been officially recorded on southeastern Vancouver Island. Included are fifteen new species confirmed here since the printing of the 1989 checklist. Monthly bar-graphs show when to expect each species.

The checklist is available from Lyndis Davis (477-9952) and at local natural history and birding stores.

**It will be available at the
VNHS General Meeting on
Tuesday, September 13
Room 159, Begbie Building,
University of Victoria
and at Birders' Night,
Wednesday September 28,
at the same location.**



Black-faced Bunting, Pennington Flash, England (photo: Pennington Wardens).

magazine headlines abounded, such as "Asian Bunting—First for UK?", "Birding World Divided Over Black-faced Bunting's Origins" and, "Bunting Splits Birdwatching World".

That same day Dave decided to look for a Ross' Gull since we were in the neighbourhood (all right, it was a two hour drive to Blackpool). The bird was not hard to find—we just followed the line of several dozen birders, with their spotting scopes, standing by the golf course where the gull was roosting.

Spring didn't arrive until the last week of our trip—it was one of the latest on record. A harsh north wind blew constantly for much of April, holding the migrants back. At times the spotting scope was blown over and in one bird hide on The Wash, in Norfolk,

I was trapped for over half an hour by a sudden snow squall from the North Sea. I spent the time talking with a couple of birders from Nottingham trapped with me. While the conversation centred on birds I couldn't help but think of ancient times—one of them looked and sounded exactly how I imagine Little John, of Robin Hood fame, would be like. Distant relation perhaps?

We returned to Canada with a ton of literature, maps, brochures and books on travelling the backroads and wildlife areas of England. Anyone who might be considering a visit is welcome to browse through this material. It was a wonderful experience, highlighted by the warmth of the birding fraternity. It felt good to be a part of it.



Dry weather birders, Northern Wales (photo: Warren Drinnan).

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Butterflies On Camas Hill

by Art Guppy

The following article may serve as a supplement to the very interesting article "Victoria Butterfly Surveys" in the May-June, 1994 issue of the *Victoria Naturalist*.

I live at the base of Camas Hill, north of the junction of Kangaroo Road and Sooke Road in Metchosin, and have observed butterflies here for about 13 years. Compared with some areas of southern and eastern Vancouver Island, this is not a good area for butterflies as it is exposed to the cool west wind off the Pacific. Nevertheless, over the years I have observed a considerable number of butterflies, including some that might be considered quite rare.

The little Moss's Elfin, *Incisalia mossii*, has been quite common here each year in late March and early April. It is a little brown butterfly that spends much of its time inconspicuously basking in the sun in a spot sheltered from wind or feeding on the nectar of early spring flowers. One favourite nectar source is the Fawn Lily (*Erythronium oregonum*), from which it often steals nectar by alighting on the back of the flower and inserting its tongue between the petals.

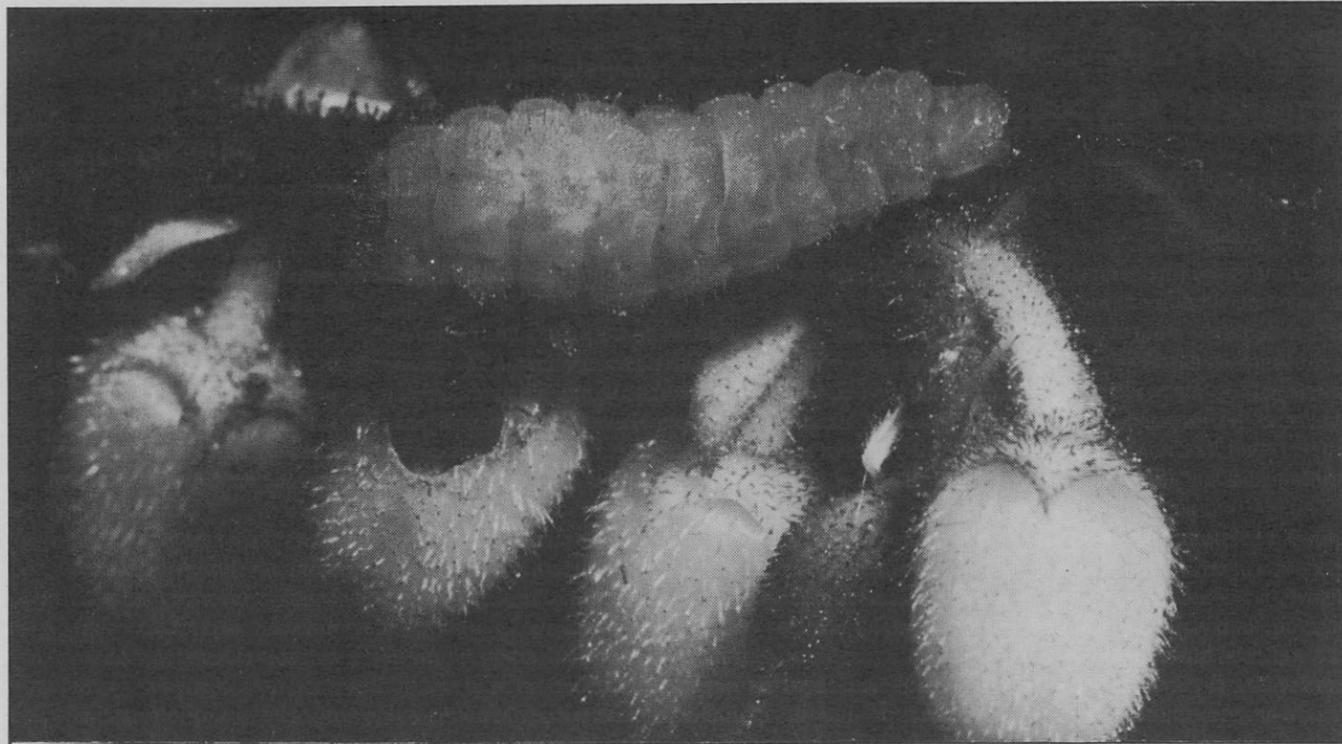
Some years ago I removed an accumulation of logging slash and debris produced by the construction of the old water pipeline that, in bygone years, supplied the Humpback Reser-



Moss's Elfin, a small, uncommon butterfly seen on rocky hills in early spring.



Stonecrop (*Sedum spathulifolium*), the food plant of Moss's Elfin.



Caterpillar of the Brown Elfin feeding on the flower buds of Salal.

voir. That clearing of rock slopes encouraged a great increase in the growth of the Stonecrop (*Sedum spathulifolium*) which is the food plant of the larvae of the Moss's Elfin, and a marked increase in the little butterfly's population followed. I believe the 20 or 30 Moss's Elfins I would then see each year represented a population of 100 to 200, though the butterfly is so inconspicuous and spends so little time in flight, it is very difficult to estimate its numbers.

This year there came a terrible crash. I saw three or four Moss's Elfins in March and none in April, and I suspect those few represented a total population of about 20. The cool, damp weather of early April may have contributed to the population crash, and warmer Aprils in future years could bring about some recovery.

Unfortunately, nature has gone terribly out of balance on Camas Hill. The removal of wolves and cougars has resulted in the deer population being limited only by starvation and disease. The deer, which normally are browsing animals, have increasingly been feeding like goats, and are ravaging the natural vegetation. *Trillium ovatum* and *Lilium columbianum* have been the first casualties and have been almost wiped out on the hill. Within the last two years the deer have taken to stripping the *Sedum spathulifolium* from the rocks. I estimate that, except on a few steep cliffs, about 90% of the stonecrop has been removed. Last year, few plants produced many flowers. If, as I suspect, the butterfly larvae feed on the Stonecrop flowers, they would have experienced very lean times. Furthermore, except in my fenced garden areas, the deer have been eating almost all of the Fawn Lily blooms (perhaps they like the sweet taste of the nectar), thus depriving the butterflies of an important source of nectar. However, the few Moss's Elfins I saw this year that had found their way into my garden seemed to find the exotic *Erythronium californicum*

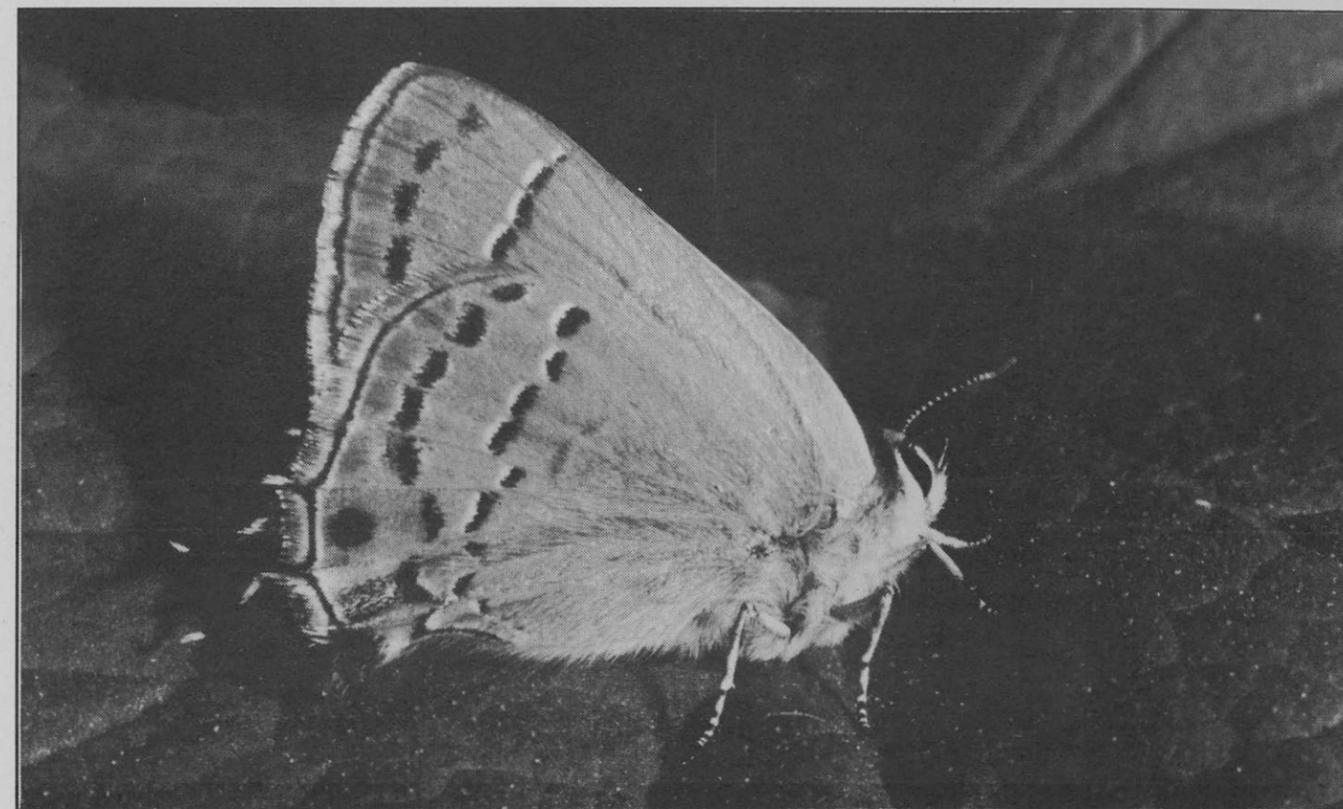
especially attractive.

I don't know if a similar destruction on the Moss's Elfin's food plant is occurring elsewhere but if so, the butterfly must be in serious danger on Vancouver Island. I suggest that in future years it would be worthwhile to extend the period of the butterfly survey to include at least the last week in March and that attempts be made to locate and watch places with suitable habitat for Moss's Elfins. I will continue to monitor the butterfly's numbers on Camas Hill.

Two other small, brown elfin butterflies are frequently seen on the hill: the Brown Elfin (*Incisalia augustinus*) is often associated with patches of Salal, and the Western Pine Elfin (*Incisalia eryphon*) is likely to be found among pines near the top. I have raised the Brown Elfin from egg to adult and observed that the caterpillar fed mainly on the flowers of Salal.

The general decline in butterfly populations mentioned in the article in the May-June issue seems to have affected at least two species on Camas Hill. Each year, until recently, I would see the occasional Clodius Parnassian (*Parnassius clodius*) but for the last two or three years the species seems to have been absent. The Great Arctic (*Oeneis nevadensis*) was quite common on Camas Hill about 1982 but has not been seen here since. There is no observable local cause for the decline of these species. The wild Bleedingheart, which is the food plant of the parnassian, is still plentiful and grasses, which are the food plants of the Arctic, are certainly not in short supply. However, these are strong-flying butterflies and may not have had resident populations on the hill.

Where I live, at the base of Camas Hill, I have been making some changes which I believe will benefit many of the birds and butterflies on the hill. At the beginning of this century the forest at the base of the hill must have consisted of a few large, widely-spaced Douglas Fir trees which subsisted by



Grey Hairstreak, a small butterfly of the summer months.

sending very long roots through the shallow, dry soil. Several of their stumps are still here today. When those trees were cut down their places were taken by many small trees which fought each other for survival. Those in turn were logged by extremely destructive methods and of the surviving trees, many were left badly battered and soon were riddled by the holes of wood-boring insects. The rough bits of road by which the logs were removed ran down the slopes and became channels for erosion which left nothing but rocks and debris. A small fire swept through part of the area and left scorched and dying trees.

Fortunately this devastation affected only a small area near Sooke Road. Much of the hill consists of open rock bluffs but there are quite large patches of virgin forest consisting of trees stunted by dryness and shallow soil. It is often very beautiful and provides a natural habitat still unsullied by man. (The open areas have been sullied by man, for there the numerous beautiful wildflowers must struggle for survival against the horrible introduced weed, Scotch Broom.)

Since it was obvious that the worst-affected of the logged areas could not return to being a healthy forest in much less than a thousand years, I undertook to make those areas into patches of meadow and, by trucking the soil, a garden with fruit trees and other deciduous trees. The woodpeckers will miss the former scene of devastation but otherwise my efforts are providing much better habitat for birds and butterflies. Already many species of butterfly have become much more numerous.

Grey Hairstreaks (*Strymon melinus*) are frequently seen during the summer, and each summer an occasional Hydaspe Fritillary (*Speyeria hydaspe*) visits my buddleia. Three species of skipper are seen every year. The Two-banded Checkered Skipper (*Pyrgus ruralis*) is common in spring from early April

onward. The Common Branded Skipper (*Hesperia comma*) is much less common but is a reliable summer visitor to my buddleia, though it is often difficult to find among the swarms of Woodland Skippers (*Ochlodes sylvanoides*).

The following are frequently seen on Camas Hill but are too common everywhere to warrant special mention: Anise Swallowtail, Western Tiger Swallowtail, Pale Swallowtail, Pine White, Cabbage White, Sara Orange Tip, Purplish Copper, Spring Azure, Mylitta Crescent, Satyr Anglewing, Mourning Cloak, Milbert's Tortoiseshell, Red Admiral, Lorquin's Admiral. The Painted Lady is common some years and sometimes absent. The West Coast Lady turns up occasionally.

Returning to the problem of the deer and the Moss's Elfin, I will just mention that I hope eventually to fence about a hectare on the hill to make a sort of Noah's Ark for the butterfly and for the plants that are suffering from overgrazing.

The root of the problem is the ever-expanding human population throughout much of the world. The plants, the deer, and the butterflies are telling us something. Unfortunately, it seems that no one is listening.

After writing the above portion of this article, I sent it to Cris Guppy at Quesnel, where he now lives, with the request that he check over the names of the butterflies to be sure they are correct. While that was being done, about the middle of May, I twice saw at Camas Hill a small, brown-coloured hairstreak which I could not identify. I wondered if it might be the rare Johnson's Hairstreak, the larvae of which feed on Hemlock mistletoe. Many people view the mistletoe on Hemlock as a type of disease and often the trees are cut down to eradicate the "disease". Unfortunately, eradicating the mistletoe also eradicates Johnson's Hairstreak. Consequently,



Hydaspe Fritillary, a medium-size butterfly of the summer months on the orchid *Piperia elegans*.

It is of great importance that mistletoe-bearing Hemlock trees, that also support populations of the rare butterfly, be identified and protected. With that fact in mind, I watched for a chance to catch the unidentified hairstreak at Camas Hill and on June 1st I succeeded and sent the specimen to Chris. It turned out to be only a moderately uncommon species and Chris's comments on it, and on some of the butterflies mentioned in this article, follow.

The hairstreak you sent is Rosner's Hairstreak (*Mitoura rosneri*). The larvae feed on Western Red Cedar and have been recorded ovipositing on the cedar that you have as a hedge (*Thuja occidentalis*). They fly starting in early May and the specimen you sent me had probably been in flight about two weeks. Johnson's Hairstreak is half again as large, closer to the size of a small Orange Tip. Their larvae feed on mistletoe on Hemlock and the four known populations in B.C. are all from Greater Vancouver. There are historical records from Vancouver Island, however, and I would expect there to be a few still extant populations. They might turn up out past Sooke in the hemlock areas.

I have classified Moss's Elfin as "vulnerable" in my forthcoming paper on "Butterflies of Conservation Concern in B.C." (accepted by the Canadian Field Naturalist). My reason for that was habitat loss due to urbanization. The effect of deer (in general) certainly has the potential to greatly increase the loss of populations.

Brown Elfin larvae probably also use the flowers of *Arbutus* on Vancouver Island. They definitely do in West Vancouver.

Great Arctics are most common during even-numbered years but occasionally turn up on odd years (a two year life cycle).

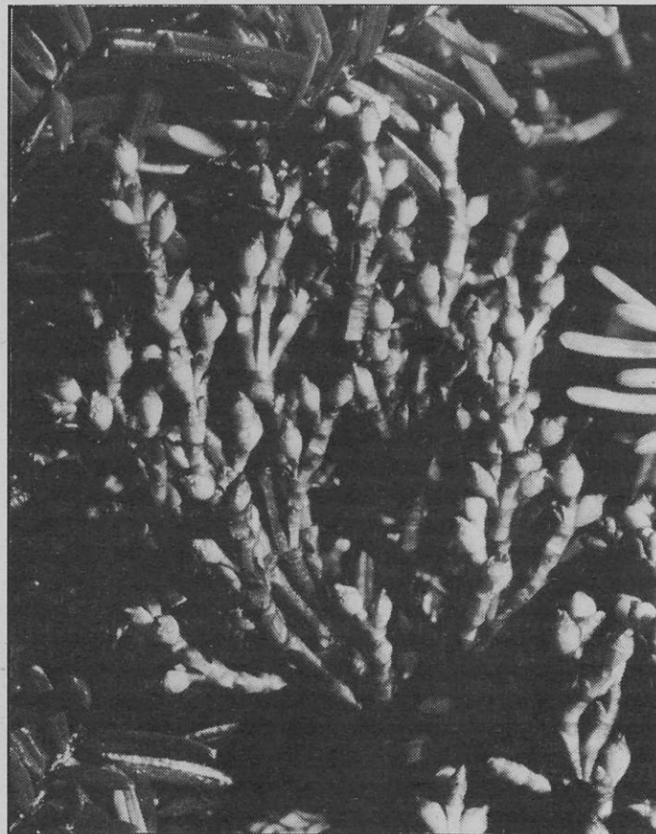
Grey Hairstreaks have at least two generations each summer (May and July) and I have one fresh specimen from Camas Hill from September, suggesting a possible third generation.

The Common Branded Skipper is quite rare on southern Vancouver Island and is a subspecies restricted to Vancouver Island (possibly southern Vancouver Island; it is not clear if the alpine populations from Arrowsmith northward are the same subspecies).

Cris also mentioned having twice seen Green Commas (*Polygonia faunus*) at Camas Hill, which adds another species to the list for the hill. No doubt there are other species still to be recorded for this location, for on several occasions I have seen butterflies which I could not identify with certainty but which I am fairly sure were not any of those mentioned above.

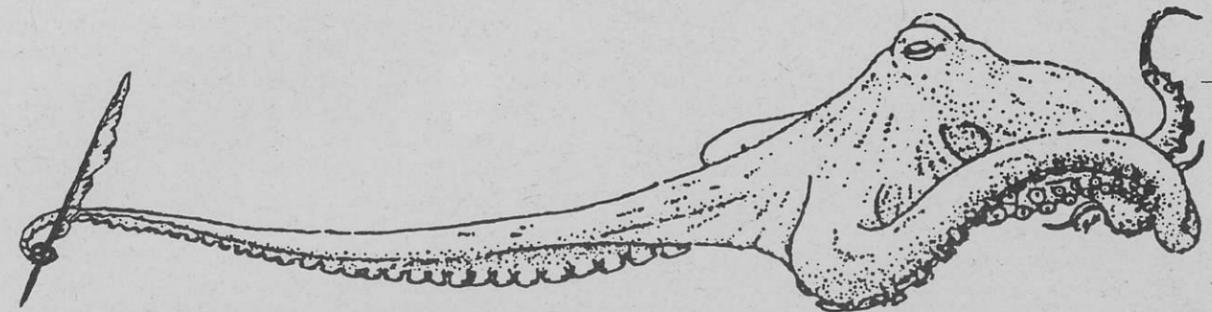
I find it extremely handy having an expert on butterflies in the family and I would like to thank Cris for his comments and for his invaluable help in identifying the butterflies mentioned in this article.

Art Guppy is a retired schoolteacher and observing plants and their relationship with animals has long been a favorite leisure-time activity. He has been a previous contributor to the Victoria Naturalist (see the May/June 1992 article on ferns).



Mistletoe (*Arceuthobium campylopodum*) on Hemlock. This mistletoe is the food plant of the very rare Johnson's Hairstreak, which was reported in the Victoria area by the Butterfly Surveys (*Victoria Naturalist*, May-June, 1994).

PACIFIC OCTOPUS



By Lynton Burger

Lying just offshore, in calm, shallow water, is a marine community that is often overlooked by divers in their sub-aquatic explorations. Birders too, will watch flocks of ducks and geese on the surface off a beach without realising the underwater attraction that lies beneath the birds' bobbing bodies. I am, of course, talking about the eelgrass community.

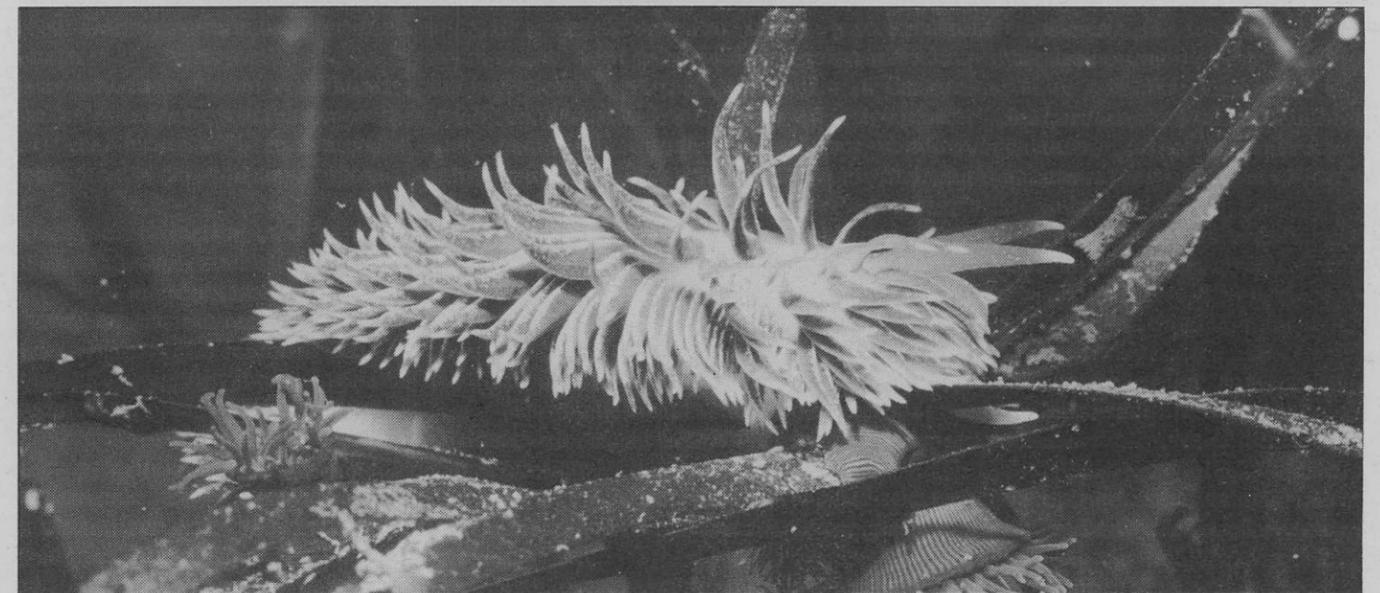
Eelgrass (*Zostera marina*) is a vascular plant that grows in the lower intertidal and shallow subtidal on soft, sandy substrates, mostly in bays and inlets or along beaches, forming characteristic beds or meadows, much like underwater wheat fields.

Diving in an eelgrass bed can be a lot of fun and the diversity of creatures encountered is unusually high. Perhaps the first creatures you'll come across are the fish that live in the water column above the eelgrass bed; look out for Black Rockfish, perches and schools of long, thin tubesnouts. As you descend into the forest of green fronds you may see juvenile

rockfish, particularly small Copper Rockfish. Rockfish, as well as salmon and herring, use eelgrass extensively as nursery areas. Herring also lay their eggs on eelgrass. Every year between February and May, herring aggregate to lay their eggs in shallow water and eelgrass is one of their preferred spawning substrates. One three-year-old herring may deposit up to 20,000 adhesive eggs and because herring spawn in schools, whole eelgrass beds can get completely covered in eggs. This attracts many marine birds, particularly ducks, geese and gulls—often forming large feeding flocks in shallow water. Fish, seals and sealions also join in the feast.

Another fish that commonly resides in eelgrass beds is an elongate, thin fish with a bony, armoured appearance. This is the Bay Pipefish, cousin of the sea horse. Like sea horses, they are live-bearers with the males bearing, and giving birth, to the young. Mating, which occurs in May and June, takes

Eelgrass (photo: Archipelago Marine Research).



The marine slug, *Aelidia papillosa*, Roberts Bay (photo: Brant Cooke, Royal British Columbia Museum).

the form of "...an elaborate ritual in which the male shakes himself, nods his head, and periodically assumes a rigid vertical 'S' position, the female entwines herself about him and presumably then transfers the fertilized eggs to the brood pouch of the male where the young develop until reaching a length of about three-quarters of an inch (19 mm)" (Hart 1973, *Pacific Fishes of Canada*). Later that summer the male will give live birth to the young pipefish, who will hide in amongst the eelgrass fronds, feeding on small shrimps and mysids.

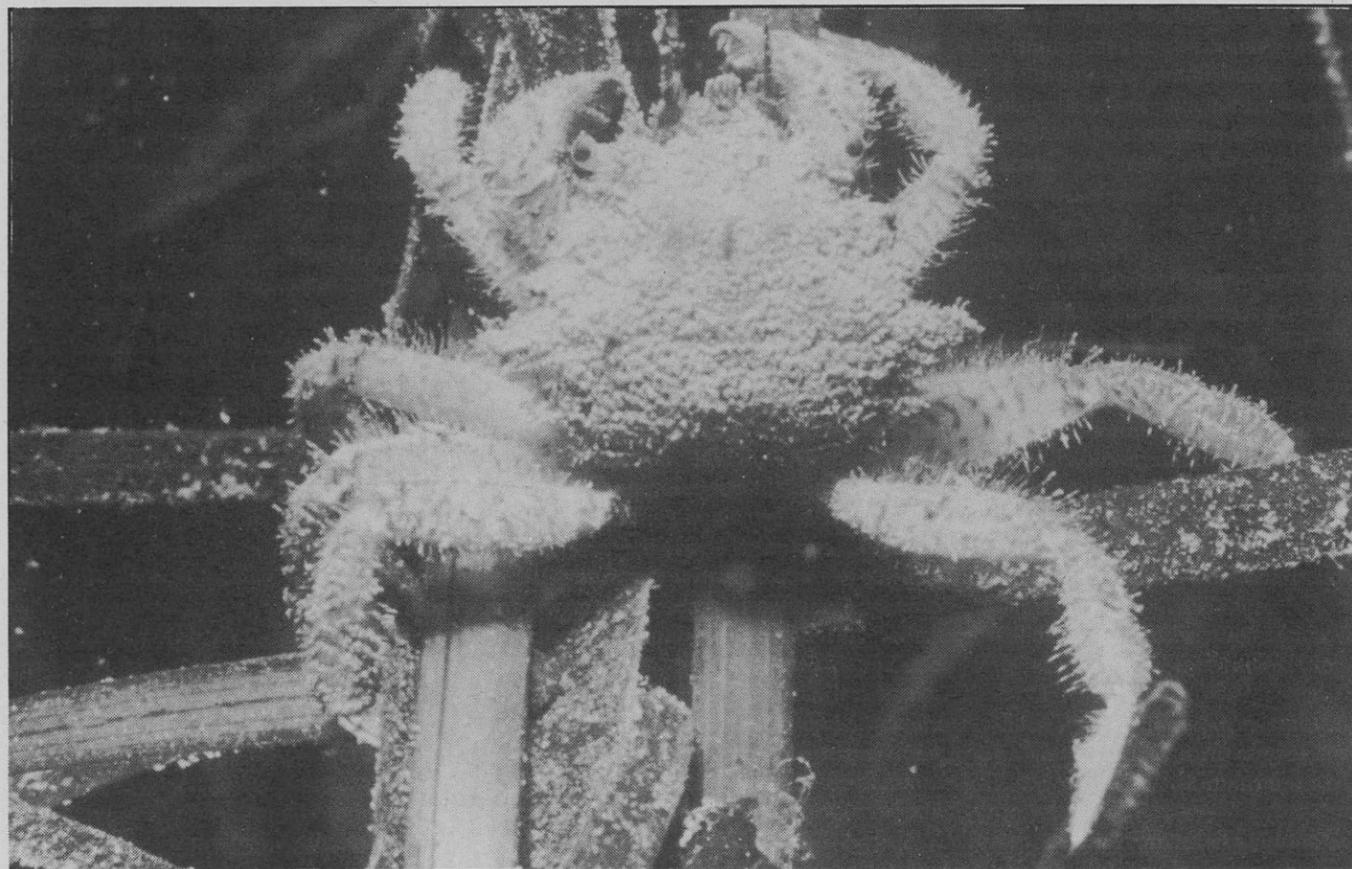
A host of invertebrate species inhabit eelgrass beds, including several species of crab, shrimp and many epiphytic invertebrates (those residing on eelgrass leaves) as well as several species that live in the sand between the eelgrass rhizomes and roots such as worms and clams. Some invertebrates are perfectly camouflaged to blend in with the green eelgrass blades—like the isopod *Idotea*. *Idotea* are very common in eelgrass beds but are seldom seen by divers as they are the same width as the eelgrass blades, perfectly camouflaged and flattened. The easiest way to find one is to slide a leaf between your fingers and once disturbed they'll weave their way through the water, using their flattened abdominal appendages as paddles.

Possibly the most attractive invertebrate that inhabits eelgrass beds is the nearly translucent sea slug *Melibe*. Common along the deeper, seaward edges of eelgrass beds, *Melibe* are a delight to observe. They have large, delicate oral hoods that sweep the water slowly in search of their planktonic food. From time-to-time they lift off from their perches and flick-flack slowly through the water to land on

a frond further along. At low tide their very pungent, perfume-like smell is unmistakable and pervades in the air where an eelgrass bed is being temporarily exposed.

Birds that are commonly attracted to, and which feed in and around eelgrass beds, include loons, grebes, cormorants, scaups, ducks, geese and gulls. Most of these live on fish or invertebrates that inhabit the eelgrass beds but some, like the Canada Goose, Snow Goose, Emperor Goose and Brant, actually feed on the long, green eelgrass fronds themselves.

In other parts of the world where seagrass meadows are common, the marine mammal family Sireniidae (dugongs and manatees) are also found. These shy, slow moving sea cows are the only marine mammal which are vegetarian. They graze on seagrasses in the Gulf of Mexico and along the Florida coast (West Indian Manatee), South American river deltas (Amazonian Manatee), the tropical west coast of Africa (West African Manatee), and in ever dwindling numbers and locations along the tropical east coast of Africa, some tropical Indian Ocean and Pacific Ocean Islands, including the northern shores of Australia (dugongs). The only Sirenian to live anywhere near British Columbia was the Steller's Sea Cow (which is closely related to the dugong). This species was last seen in the Bering Sea, west of Alaska in 1768. However, fossil records of this species have been collected in California, so we can't dismiss the possibility that at some time they would of been found wallowing in Sooke Basin or off Dallas Road, munching on *Zostera marina*.



Helmet Crab, *Telemessus cheiragonus* (photo: Brant Cooke, Royal British Columbia Museum, Marine Biology Division).

CALENDAR

REGULAR MEETINGS are generally held on the following days. **Board of Directors:** the first Tuesday of each month. **Natural History Presentations** (formally known as the General Members Meeting): the second Tuesday of each month. **Botany Night:** the third Tuesday of each month. **Birders' Night:** the fourth Wednesday of each month. Locations are in the calendar listings. Telephone the VNHS Events Tape (479-2054) for further information and updates.

SEPTEMBER EVENTS

Tuesday, September 6

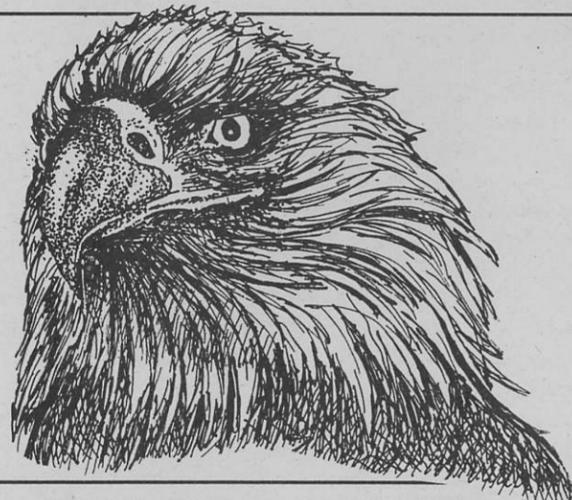
Board of Directors' Meeting. Clifford Carl Reading Room, Cunningham Building, University of Victoria at 7:30 p.m. Note that Parking Lot "A" by the Cunningham Building no longer exists.

Wednesday, September 7

Bird Migration Workshop. For information and registration contact Mike Shepard at 388-4227.

Saturday, September 10

Sidney Spit Birding. Spend the day exploring the sand dunes and tidal flats of this beautiful marine park. This is a great time of year for waterfowl, songbirds and migrating shorebirds. Meet at the foot of Beacon Avenue in Sidney in time for the 9:00 a.m. ferrysailing. Bring ferry fare and a lunch. Leader: David Pearce (658-0295).



LOOK OUT for the NATURAL HISTORY PRESENTATIONS

Opening Program—Sept. 13
7:30 p.m., Room 159, Begbie Bldg, U-Vic

Dr. Allan McGugan

"Geological Adventures in the Peace River Rockies"

• Talk and Film • Coffee and Treats

DOOR PRIZES INCLUDE A ZODIAC TRIP TO CHATHAM IS.

Saturday, September 10
Butterfly Count. If interested in participating in this final count of 1995, contact G. Gaskin at 384-1573.

Tuesday, September 13

VNHS Natural History Presentation. Room 159, Begbie Building, University of Victoria at 7:30 p.m. Our new season of talks opens with a combination talk and film presentation by Dr. Allan McGugan titled *Geological Adventures in the Peace River Rockies*. There will be door prizes, coffee and treats. Bring friends, your coffee mug and help get the new season off to a good start.

Saturday, September 17

Insecting Uplands Park. Come and spend a couple of hours searching for insects, etc., in this delightful city park. Meet at the Cattle Point parking lot at 10:00 a.m. Leader: Syd Cannings (721-0338).

Tuesday, September 20

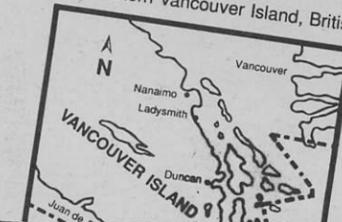
Botany Night. Swan Lake Nature House, 7:30 p.m. Phone the VNHS Events Tape at 479-2054 for details.

July 1994

Checklist of Birds 

Compiled by Bryan R. Gates and Keith Taylor

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Saturday, September 24

Hawk Watch at Beechey Head. This should be the best day for watching the annual hawk migration over southern Vancouver Island. In previous years up to 13 species of raptors were observed during a weekend, including two Broad-winged Hawks. Meet at Helmcken Park 'n Ride at 9:30 a.m. or at the Aylard Farm entrance to East Sooke Park at 10:00 a.m. Leader: David Allinson (478-0457).

Wednesday, September 28

Hawk Watch at Beechey Head. Hawk migration continues over East Sooke Park. Escape the weekend crowds on this mid-week outing. The spectacle of 150+ Turkey Vultures in a kettle over Becher Bay is well worth the drive. Meet at the Aylard Farm entrance to the park at 10:00 a.m. Leader: David Stirling (477-0625)

Wednesday, September 28

Birders Night. Room 159, Begbie Building, University of Victoria at 7:30 p.m. *Cayos, Copan and Canals - A Birder's View of Central America.* Bryan Gates will present a slide-illustrated talk on coastal habitats, Maya ruins and the natural history of five Central American countries. Everyone is welcome. Bring a friend, your coffee mug and your binoculars for a close look at the screen.

OCTOBER EVENTS

Sunday, October 2

Hawk Watching Continues. Data from previous years show that Red-tailed Hawks, Golden Eagles, Rough-legged

Take a Peek at the October Natural History Presentation:

BIODIVERSITY

7:30 p.m.
Tues. Oct. 11
Rm. 159
Begbie
U-Vic

by Evelyn Hamilton,
Research Branch
Ministry of Forests

All Welcome
Door Prize



Hawks and Northern Goshawks can be seen in October. Meet at the Helmcken Park 'n Ride at 9:30 a.m. or at the Aylard Farm entrance at 10:00 a.m. Leader to be announced.

Tuesday, October 4

Board of Directors' Meeting. Clifford Carl Reading Room, Cunningham Building, University of Victoria at 7:30 p.m. Note that Parking Lot "A" by the Cunningham Building no longer exists.

Saturday, October 8

Pelagic Birding off Vancouver Island. The Western Institute of Global Studies, Inc. (WIGS) is planning an offshore cruise in search of albatross, shearwaters, fulmars, storm-petrels and jaegers this Thanksgiving Weekend. Previous trips have found rarer species such as Flesh-footed Shearwater and South Polar Skua. Laysan Albatross is a possibility too. For further information and registration, please contact Mike Shepard at 388-4227.

Tuesday, October 11

VNHS Natural History Presentation. Room 159, Begbie Building, University of Victoria at 7:30 p.m. This month presentation is by Evelyn Hamilton, Technical Advisor on biodiversity for the Research Branch, Ministry of Forests. She will speak about *Biodiversity*. Find out about what this means and how it affects our role as environmental protectors. Bring friends, coffee mugs and possibly take away a door prize.

Saturday, October 15

Gowland Range Hike. Enjoy fall colours and beautiful scenery on this early fall hike to one of Victoria's newest parks. Meet at Helmcken Park 'n Ride at 9:30 a.m. Leader: Bev Glover (721-1476).

Tuesday, October 18

Botany Night. Swan Lake Nature House, 7:30 p.m. Phone the VNHS Events Tape at 479-2054 for details.

Sunday, October 23

Birding at Island View Beach. Many wintering water-birds can be seen from Island View Beach Regional Park. Northern Shrikes and even Short-eared Owls have been seen in the fields nearby. Meet at the park parking lot at 8:30 a.m. Leader: Bruce Whittington (652-1529).

Wednesday, October 26

Birders Night. Room 159, Begbie Building, University of Victoria at 7:30 p.m. Did you know that, in its lifetime, a tine Western Sandpiper may fly the equivalent of four times around the world? Rob Butler of the Canadian Wildlife Service will tell us how this was determined along with other fascinating research findings during his slide-illustrated talk - *Shorebird Migration and Bird Banding Opportunities for the VHNS*. Everyone is welcome. Bring a friend, your coffee mug and your binoculars.

Saturday, October 29

Birding at Witty's Lagoon. Witty's Lagoon Regional Park offers a variety of habitats, from forest to sandy beach. Enjoy a pleasant stroll to the beach and back while searching for fall migrants. Meet at the park parking lot at 9:00 a.m. Leader to be announced.

NOVEMBER EVENTS

Wednesday, November 23

Birders Night. Room 159, Begbie Building, University of Victoria at 7:30 p.m. *In Quest of Hawaii's Birds.* Here is your chance to escape a cold November night and imagine yourself, warm and tanned, among the birds and natural treasures of Hawaii. Robert Ward of Victoria, an accomplished wildlife photographer, will show us some of the endemic, introduced and migrant species of this mid-Pacific paradise. Everyone is welcome. Bring a friend, your coffee mug and your binoculars.

BULLETIN BOARD

Rocky Point Survey.

Participants wanted to assist in the Rocky Point bird survey most weekdays in september. This project began August 1 and continues to October 1. Here is an opportunity to see this unique area. We are hoping to get members who can devote four days to the project. For more information contact the project coordinator, Mike Shepard, at 388-4227.

Needed!

The Publicity and Program committees are seeking a few members to donate some home baking for our opening meeting - Natural History Presentations - on September 13. If any member is willing to donate a door prize for any of the 1994-95 Natural History Presentation meetings (formerly the General Members Meeting) please contact Bev Glover 721-1476.

Reminder!

The Swan Lake Nature Centre holds birding walks regularly on Wednesdays and Sundays at 9:00 a.m. Everyone is welcome to join in.

Calling All Paddlers!

As a new member of the Victoria Natural History Society I would hike to hear from fellow paddlers who would be interested in going birding via kayak or canoe. Call Marcia Farquhar, 474-6890.

"Writing in the Outdoors" Workshop.

"Writing in the Outdoors", part of a Simon Fraser University continuing studies writing program, is a weekend literary natural history workshop. The workshop will be held by writer Suzanne Rowen and Naturalist Al Grass at the secluded heritage house, Sutil Lodge, on Galiano Island. The workshop will be held from October 14 to 16, 1994 with a pre- and post-trip evening meeting to be held at Simon Fraser University on October 4 and 25. The price of \$485 includes instruction, accommodation and meals. Telephone Suzanne at (604)926-9056 for further information.

Washington State & B.C. Birding E-Mail.

Dan Victor (<dvictor@u.washington.edu>) There is a Washington State (plus B.C.) birding email group called tweeters. This group currently is comprised of 130+ subscribers mostly from around Washington State but also extending into Oregon, British Columbia. Gene Hunn posts the Washington State birding hotline weekly. If you have Internet access send email to listproc@u.washington.edu with

the following test line "information tweeters". This will give more details on the list and how to subscribe.

For Sale

Ocean to Alpine - A British Columbia Nature Guide. This new book by Joy and Cam Finley is available from Lyndis Davis (477-9952). Also Available for sale: National Geographic's *Field Guide to Birds*; the *Naturalist Guide to the Victoria Region*; *Birds of Victoria*; the Victoria Area Bird Checklist; and, the new Victoria Natural History Society's Window Decals.

Back Issues of the Victoria Naturalist

Copies of back issues and indices of the Victoria Naturalist are available from Tom Gillespie (361-1694).

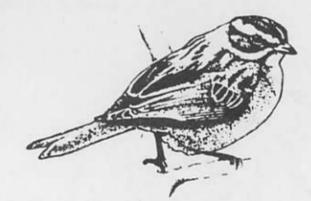
Garry Oak Meadow Society Membership

The Garry Oak Meadow Society aims to promote, conserve and restore our native oak meadow lands. You can help them to preserve our rarest Canadian habitat by joining the Society or through donations to any branch of Pacific Coast Savings Credit Union. For information: Garry Oak Hotline, 727-6634, or Joyce Lee at 386-3785.

Marine Ecology Station

Explore British Columbia's marine bio-diversity at the Cowichan Bay Maritime Centre. Life exhibits of B.C. sea life can be seen under microscopes and in live video displays. Programs available for schools, camps, naturalists and educators. Located on the water at 1761 Cowichan Bay Road. Information: 746-4955.

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<input type="checkbox"/> American Pipit																

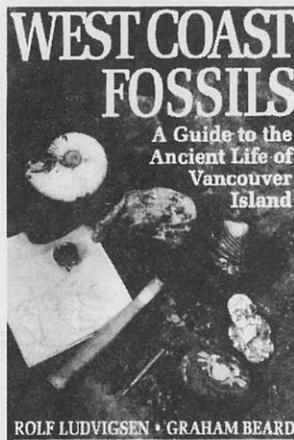
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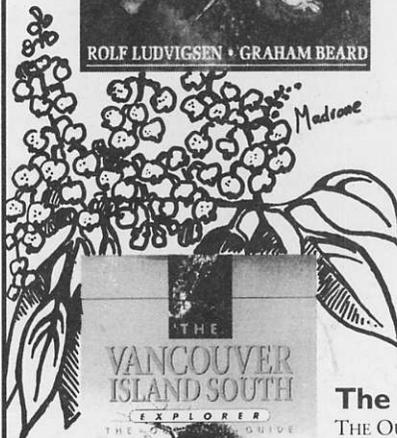
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