

Anemone, *Urticina (tealia) crassicornus* (fig. 1)

© Leah Ramsay

Marine Adaptations No. 1 Floating Groceries

BY LEAH RAMSAY

Imagine an environment with enough food in it that all you have to do to dine is attach yourself to the nearest rock and open your mouth. Very few terrestrial organisms come close to this lifestyle, spiders and ant-lions being a couple who do. To enjoy such a luxurious lifestyle the food source must be consistent and reliable, as it is in the nutrient-rich waters around Vancouver Island. High concentrations of phytoplankton, zooplankton and diatoms are associated with a phenomenon called 'upwelling'. Nutrient-filled deep cold water comes to the surface layers of the near-shore ocean to replace the upper layers of water

that have been displaced due to the prevailing winds.

The structures used to gather this rich food source vary between animal groups, yet there is little difference in function. Particles must be collected from the water column efficiently, either by using natural currents or by creating currents, and sorting of particles according to size is done at this point.

The delicate crinoids or "feather stars" remain attached to the benthos (bottom) while feeding. Each of their arms has a series of tube feet in a plane at right angles to the current to maximize efficiency. The food gets trapped in the arms, then is passed down a groove coated in mucous via shorter tube feet to the mouth. Crinoid species that live in crevices where there are multidirectional currents have 4 rows of feet per arm arranged at right angles to each other to enhance food capture from several directions.

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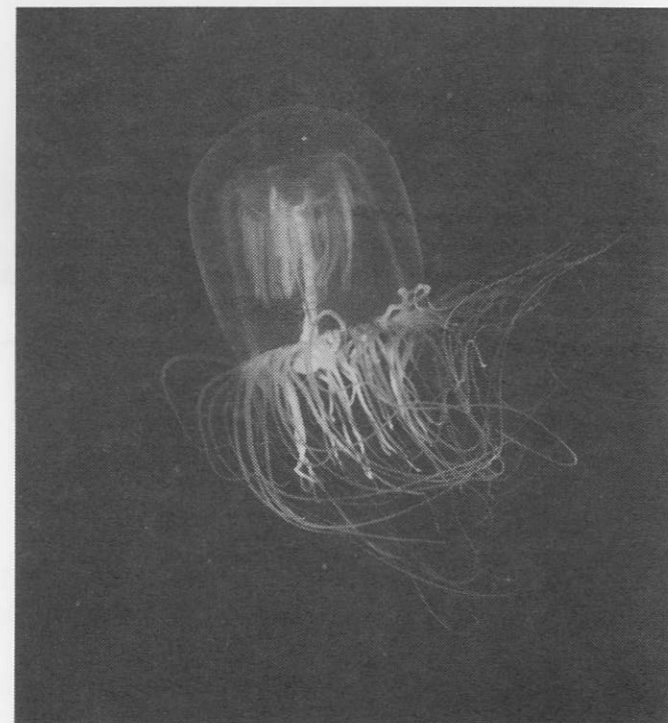
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The small white sea cucumber *Eupentacta quinquefemita* spreads its tentacles, densely packed with tube feet, into the current and when one of the bushy arms gets saturated with plankton it is bent in to the oral cavity and "licked" off. When *E. quinquefemita* is not feeding the tentacles can be drawn inside, minimizing the chances of predation or damage – and looking just like a white gherkin.

Although jellyfish (fig. 2) swim, they don't actively search out prey items but feed on zooplankton or small fish that they bump into. Some or all of the tentacles contain nematocysts, very fine spear-like structures with spines and paralytic toxins of various strengths and types. Once paralyzed, the food item is moved up into the oral cavity (mouth) and consumed. Another cniderian (the phylum that contains jellyfish, corals and hydras) that most people are familiar with and that also uses nematocysts are the anemones (fig. 1). Next time you're on a beach at low tide put your finger on the edge of one of the small green anemones (*Anthopleura* sp.). The slightly "sticky" feeling is the result of discharged nematocysts against your skin.

In general, the greatest density of organisms that feed on suspended particles can be found in higher current areas like Race Rocks, Ogden Point Breakwater, Active Pass and Ten-mile Point.

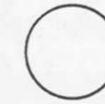


Jellyfish, *Polyorchus penicillatus*. Dallas Rd. Breakwater (fig. 2) ©Leah Ramsay

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Do you have an orange dot on this circle? If so, you have not paid your dues prior to the January 1, 1987 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.

From the Editor

Contest

Many thanks to all who participated in the Lodge Accommodation Contest. The number and quality of submissions was really impressive. To select a winner six judges, with varied interests in natural history, were asked to choose their favorite three. Their first choice was an article and photographs by Tracy Hooper entitled "Victoria's Urban-Nesting Glaucous-winged Gulls". Some consolation to those who did not win is that nearly all submissions received at least one vote.

For me, the best part of the competition is that I have a nice bundle of good material for future issues of the Naturalist. When members submit good, interesting material we have a good, interesting magazine. It's as easy as that. So I hope you find this issue enjoyable reading, because it reflects the increased participation that has occurred due to the competition.

We can't always offer a prize for the best submission, that is, the most enjoyable in the opinion of the judges, but we are undertaking to persuade businesses to donate merchandise, services, etc. as an ongoing thing. So for this next competition, the "Field Naturalist" is donating a book, *Field Guide to the West Coast Mountains*, by Stephen Whitney, as a prize for the best submission. I hope I will receive some more good material as a result. Remember, the magazine is only as good as you want it to be.

Send entries to: Mark Nyhof, The Victoria Naturalist, 220 Beechwood Avenue, Victoria, B.C. V8S 3W7

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Victoria's Urban-Nesting Gulls

Contest Winner

BY TRACEY HOOPER

Glaucous-winged Gulls traditionally nest in colonies on low, rocky offshore islands. Two well-known local breeding colonies are found on Mandarte Island and the Chain Islands.

Not long ago, it was discovered that not all Glaucous-winged Gulls in the Pacific Northwest nest in offshore colonies. In 1963, F. Oldaker found a nest on the roof of the Canadian National Steamships Dock on Vancouver's waterfront (Oldaker 1963). Oldaker believed this to be the first coastal record of city-nesting gulls, but a later paper by Eddy (1982) reported gulls have nested on buildings on Seattle's waterfront since 1946.

Since Oldaker's report, there have been only sporadic records of urban-nesting Glaucous-winged Gulls on our coast. Sanford (1974) found four roof nests in Gastown, Vancouver. Campbell (1975) recorded 71 nests on a man-made jetty in Burrard Inlet, North Vancouver. In 1976, a minimum of 17 pairs of gulls nested on waterfront property of the Burrard Drydock, North Vancouver (Poynter 1976).

During the 1950's and 1960's, Eddy (1982) estimated Seattle's urban-nesting gull population to be about 50 pairs. In 1978, 77 nests were found; in 1981, the count had risen to 140 nests.

Hobson and Wilson (1985) presented the most recent records of Glaucous-winged Gulls nesting on man-made structures on our coast – 40 nests were found on the support beams of the Second Narrows Bridge in Vancouver.

Does Victoria have an urban-nesting gull population?

Until 1986, little was known about Victoria's urban gulls. A check through the B.C. Provincial Museum's Nest Record Scheme turned up only four records (dating from 1958 to 1972) of gulls nesting on roofs or other man-made structures. Conversations with museum personnel, members of the Victoria Natural History Society, and the Victoria SPCA resulted in another nine records dating to 1985.

With only thirteen records over a period of 27 years, it did not seem as if Victoria's urban-nesting gull population was a serious problem. A survey conducted during the summer of 1986 though, changed this perception.

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The survey was part of a Canadian Wildlife Service project to assess the urban-nesting gull populations of Victoria and Vancouver. Because it was the first time a study of this nature had been conducted, an all-out effort was made to find as many urban nest sites as possible. The results for Victoria were surprising. Seventy-nine nest sites were confirmed; another 31 sites were suspected but unconfirmed (fig. 1). (Four nests were also found around the town of Sidney). Judging from the type of nest sites used, and the number of potential sites available, 110 (79 + 31) nesting pairs of gulls in town is probably a minimum estimate of Victoria's urban-breeding gull population.

What kind of sites are used by urban-nesting gulls?

The majority of nests (86.8%) found during the survey were built on building roofs, most of which were flat rather than pitched. Other structures used were dolphins (marine pilings), building ledges, the control house on a moving crane, a board on top of a water-tower, and a drydock. Nesting structures were situated anywhere from 0 to 500 m from salt-water.

Most roof nests were built on business or commercial buildings (eg., office buildings, retail stores), but residential (houses, apartments) and industrial (eg., machine shops) buildings were also used. Heights of these buildings ranged from about 5 to 21 m.

One of the most noticeable characteristics of roof nests was their placement against structures on the roof. Most nests were placed against exhaust fans or skylights, in corners, between the roof slope and chimney base, or against a wall or chimney. A few nests were built on top of elevator shafts. Nests were usually placed where some shelter was provided but the bird's view was not obstructed.

Are Victoria's urban-nesting gulls just a curiosity?

Victoria now joins the list of cities worldwide that have urban gull populations. For years, residents of cities in Bulgaria, north-west Germany, the eastern U.S., Norway,



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Sweden, New Zealand, England, Ireland, and Scotland have lived with nesting gulls (Cramp 1971). In order to project population trends of Victoria's urban gulls, we should consider records of roof-nesting gulls in Britain's coastal towns.

The most common gulls nesting on British buildings are Herring and Lesser Black-backed Gulls. Although the earliest record of Herring Gulls nesting in British towns was in 1910, roof-nesting was relatively rare before 1950 (Cramp 1971, Coulson and Monaghan 1978). The population of Herring Gulls nesting on British buildings is now estimated to be increasing by 17% per year – at this rate, the population doubles every five years. The situation is worse with Lesser Black-backed Gulls. Their

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population is increasing at an average rate of 28% per year, or is doubling every three years. From a different perspective, the number of British buildings being colonized by roof-nesting gulls has increased by 9.3% per year (Coulson and Monaghan 1978).

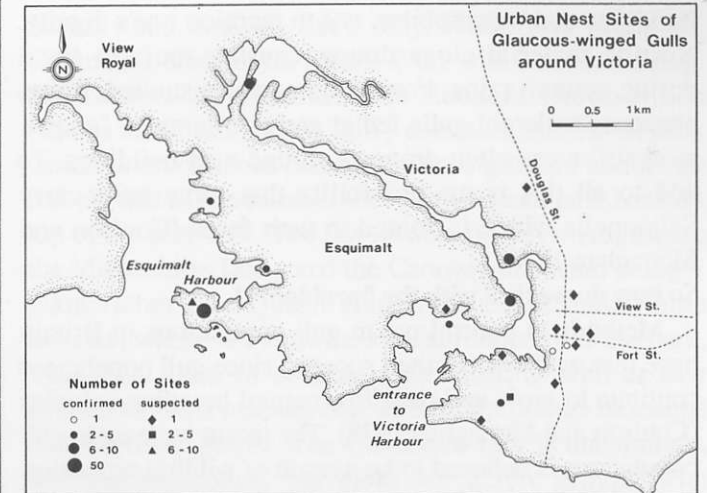
Why are nesting gulls doing so well in urban environments?

The main reason for flourishing urban gull populations may be that structures like roofs do not allow the same high nesting densities found in offshore island colonies. Vermeer (1963) and Verbeek (1986) found that nests on Mandarte Island were placed, on average, 2.6 m from the nearest nest. Nests on Victoria roofs were placed an average of 19.7 m from the nearest nest. Even though roofs simulate natural islands, their sizes and irregularities (fans, drains, skylights, etc.) limit the number of potential nest sites. At high nesting densities, territorial attacks by neighbouring gulls are a major cause of chick mortality (Coulson and Monaghan 1978). With low nest densities on roofs, chicks often experience little aggression from other gulls. Roofs and other man-made structures also offer protection from predators (eg. River Otters) which can ravage offshore island colonies (K Vermeer, pers. comm.).



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But are gulls really more successful nesting in urban rather than "natural" colonies? On Mandarte Island, an average of 1.0 and 1.7 chicks fledged per nest in 1961 and 1962, respectively (Vermeer 1963). On Victoria's roofs, an average of 1.6 chicks per nest fledged. Although fledging success rates for local natural colonies are not available for 1986, they are not expected to differ significantly from Vermeer's 1963 results. It is felt the urban environment is being colonized by gulls unsuccessful in competing for nest sites in crowded island colonies (Campbell 1975, Coulson and Monaghan 1978). It may be, then, that gulls nesting in cities are not necessarily more successful in raising young, but rather, more gulls prevented from nesting in the offshore colonies are now finding uncrowded nest sites in town.



What should we expect of Victoria's urban-nesting gull population?

With only one seasons' data, it is impossible to determine how our urban-nesting gull population might be changing. Since the population of Glaucous-winged Gulls increased nearly 3.5 times in British Columbia in the last 50 years (Verbeek 1986) and almost doubled in the Straits of Georgia and Juan de Fuca between 1960 and 1974 (Campbell 1975, Verbeek 1986), and since the trends do not appear to be changing, we can expect our urban-nesting population, to increase. With an increase in the urban population, more areas of town will be colonized. Eddy (1982) found 77 nests within 320 m of salt-water in Seattle in 1960; by 1981, 140 nests were located at distances up to 1 km from salt-water.

The prospect of gulls becoming the new neighbours on the block may seem amusing at first, but actually living with gulls is another matter. The highest concentration of urban gull nests was found at CFB Esquimalt Dockyard. Throughout the summer, Dockyard personnel lodged numerous complaints about sharing their work place with breeding gulls. Gull colonies, natural or urban, are noisy, smelly places. More than one Dockyard employee was "dive-bombed" by gulls trying to protect eggs and young. Gull droppings damage roofing materials and paint on



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buildings and automobiles, not to mention one's dignity. Nesting material clogs drains, causing roofs to flood during autumn rains. From food samples studied, it was obvious Dockyard gulls fed at garbage dumps – "choice morsels" were often dropped around nest buildings. To add to all this is the possibility that some gulls carry Salmonella which is voided in their feces (Coulson and Monaghan 1978).

So how do we deal with the "problem"?

Methods to control urban gull populations in Britain have met with very limited success, since gull populations continue to grow and overflow natural breeding colonies (Coulson and Monaghan 1978). The recent increase in gull populations is believed to be a result of wildlife protection laws and increased food supplies in the form of deliberate handouts, garbage dumps, sewers, and jettison (Cramp 1971, Eddy 1982). If this is true, and if we choose not to share our towns with gulls, we may be faced with the dilemma of controlling either the natural gull population or the way we dispose of garbage. Controlling gull numbers would probably be easier and less expensive, but not nearly as beneficial as finding better ways of dealing with garbage. After all, our garbage causes more problems than just urban gulls.

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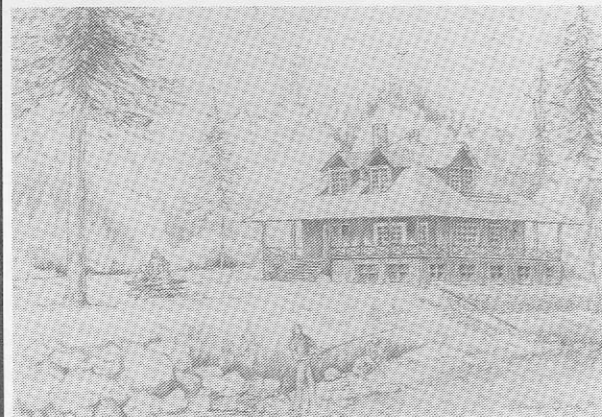
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The Wild Flowers of Uplands Park

BY A.R. DAVIDSON

The history of this park is fairly well known. It must have been around 1910 that the northern half was fully developed with well-planned winding roads, cement sidewalks and underground wiring. The boom of 1911 and 1912 was followed in 1913 with a depression and then the Great War. Building stopped. The Uplands Company had no money for taxes, so a deal was made with Oak Bay that the Municipality would take over the southern half (about 70 acres) in lieu of taxes. This section had not been developed, except for the planting of a double row of black ash trees and one of eastern maple, outlining proposed streets. The trees are still there. The Oak Bay Councils have had the wisdom to leave the area in its original state.

The Garry Oak is the dominant tree, with some majestic specimens going back to Queen Elizabeth I's time. There are many cottonwoods and aspens in the swampy parts. I think most trees native to this area can be found here, including Cascara, Willows, Maples, Douglas Fir, Arbutus and Alder. The commonest shrub is the English Hawthorne, with the native Black Hawthorne coming a close second. The others are Snowberry, Ocean Spray, Red Osier Dogwood, Hardhack, Twinberry, Syringa, Gorse and far too much of the pesky Broom which has taken over much of the formerly open meadow.

The park is a truly natural area, never having been logged or plowed. Some areas are so heavily wooded as to be impenetrable, and here a pair of Cooper Hawks have often nested.

The blooming time of flowers is of course subject to weather conditions but the following is average. The first flower to see is the Indian Plum in about the third week in January, followed three weeks later by the Satin Flower which grows in profusion in certain sections. By about the middle of March, Spring Gold is showing in many places. Then in rapid succession at the beginning of April you will find Erythronium lillies, Buttercups, and little blue Veronica, two species of Peacocks, Oregon Grape, Blue-eyed Mary and Sanicle. The small blue Camas blooms plentifully throughout April, and the blue of the Camas with the gold of the Buttercups is a sight to behold. The tall blue Camas which blooms later in sApril in the damper spots can be thirty inches tall and bear as many as fifty blooms. Lewis Clark calls this the "Grand Camas". The tall blue Lupin is the prominent May flower covering many acres of the park. The yellow Lupin which is a shrub is an introduced species. The June flowers are the plentiful white Tritellia and the beautiful purple Harvest Brodiaea, and in patches can be seen the white (northern) Bedstraw and a few deep blue Larkspur. July brings along the Rein Orchids, which are scattered around the park, while the Ladies' Tresses, also an orchid, can be seen in hundreds in one of the fields. In the park there is just one patch of

Sneezeweed and we have only found one group of Goldenrod, but the St. John's Wort with its small daisy-like flowers are plentiful. The Hooker's Onion which blooms about this time is fairly common, but the Geyer's Onion is much more plentiful. These grow to about two feet tall and in late summer they form a small pink head on top of the thin stalk. The last flowers of July – August are the Michaelmas Daisy and the Caraway, the latter being a plant rather like Queen Anne's Lace but much more delicate, whose white flowers are sprinkled over the park. The Wild Rose, of course, is plentiful, as well as two species of Honeysuckle, one with bright orange blossoms and the other purple. The Chocolate Lily is uncommon, and inconspicuous, but there are a few groups. The Gumweed (*Grindelia*) grows on the coastal areas only; it flowers from summer to fall, but only at Cattle Point.

This list of flowers is getting too long. The botanists have identified 243 species, but we go there, my wife and I, just to enjoy the beauties of the park, the colours and scents, and the peace of the woods. Naturally we also keep track of the birds, we know them well and how they are doing. There, in the middle of a built-up area, you can feel miles away from all cars and condominiums. Fortunate Victorians!

Book Review

BY BRUCE WHITTINGTON

Nature Sounds of the Northwest

Vol.1: *Birds of the Dry Interior*

Vol.2: *Birds of the Estuaries and Mountains*

By Peter R.B. Ward and Ken J. Hall

Total Recording, Vancouver

Vol. 1, 33 rpm record or cassette tape, \$10.00

Vol. 2, cassette tape, \$10.00

I'm hard pressed to explain how bird song recordings find their way into the book review section, but let's just say that they're as useful to we naturalists as books, and leave it at that.

Ken Hall and Peter Ward, who are both from Vancouver, have set out to provide a useful selection of recorded bird songs for the Northwest. The first question is, "Aren't there already recordings available?" The answer is, of course, "Yes," or, rather, "Yes, but..." the "but" is important because in areas where other recordings are weak, the Hall and Ward products are much improved.

In an ideal bird song recording, we should expect complete coverage, long cuts, several versions of each song, and high fidelity. In practice, you almost always have to sacrifice something. The venerable Roger Tory Peterson tapes are complete, but short and with little variety. Recordings by Donald J. Borror are excellent in having several examples of each song, but none are entirely suitable for the Northwest.

Ken Hall and Peter Ward have compromised by limiting each record/tape to about 60 species. But the recordings are excellent, with long cuts for each species. I particularly like their use of the natural timing of the songs; if a Swainson's Thrush sings every three seconds, you hear it on the recording every three seconds.

Vol. 1, *Birds of the Dry Interior*, is very useful in south-central B.C. and adjacent Washington, but about 60% is also useful on the coast. Vol. 2, *Birds of the Estuaries and Mountains*, was prepared for the coast and is excellent in this area.

In both volumes, birds are grouped according to habitat preferences; wetlands, mountain coniferous forests, sagebrush-bunchgrass zone, etc. This is for the most part useful, except where overlap may occur, as with Hammond's and Dusky Flycatchers. All songs are identified on the recordings.

Unfortunately, neither volume includes more than a few common shorebirds, admittedly a difficult group to cover. Also poorly represented are the owls, with only three on Vol. 2, and the quality is much poorer than the rest of the cuts.

The single best thing about these recordings is that at last we can hear birds singing in the same dialects that we hear in the northwest. The White-crowned Sparrow is far "better" (meaning "more familiar") than other recordings I have heard, for example. This is especially encouraging for newer birders, because identifications come more quickly, with less straining to match western bird songs with recordings of eastern birds.

With a winter of evenings ahead of you, and these recordings to guide you, by next spring you could be impressing your friends as you identify those chips and squeaks in the trees. But I don't recommend that you play these tapes at parties – the catcalls soon drown out the bird calls!

1986 Birding Year

BY KEITH TAYLOR

Since the introduction of the southern Vancouver Island species-occurrence bar graphs presented in the *Victoria Naturalist* (of which a revised version now exists), I feel that a yearly supplement composed of the year's variations from these graphs is all that is needed to give a total picture of the uniqueness of each birding year. These variations are usually weather-related, consisting primarily of early or late arrivals and departures in both spring and autumn migrations, and spiced with rarities that have been blown or otherwise forced off-course.

The 1986 birding year actually began in November of 1985, when an Arctic front brought heavy snowfall and temperatures well below freezing. Ron Satterfield had found his final and best rarity of 1985: Canada's first

Kittlitz's Murrelet. Who will soon forget that icy blast while scoping from the Ogden Point breakwall for this white-faced alcid! The bird was first sighted on November 24, 1985, and remained until April 10, 1986, and was well-documented by photographs (T. Zurowski). The freezing weather in November and December also caused a withdrawal or die-off of many species that normally remain here because of our Mediterranean winters. Those most affected were Cattle Egret, Virginia Rail, Killdeer, Common Snipe and Marsh Wren, Red-winged and Brewer's Blackbirds, and Golden-Crowned, Lincoln's and Savannah Sparrows. Ducks, Geese and Swans were temporarily affected, leaving the frozen fields to find refuge at Sidney Island lagoon. This weather was also responsible for the invasion of large numbers of Varied Thrushes and (to a lesser extent) Red-breasted Sapsuckers.

A cool and wet spring had northbound migrants appearing later than usual, especially Western Wood Pewees and Olive-sided and Willow Flycatchers. The wet fields enabled some species of ducks to remain later and in above-average numbers, Green-winged Teal and Shovellers in particular. These wet fields also brought more than the usual numbers of spring shorebirds: Lesser Yellowlegs, Solitary Sandpipers, and to a lesser extent both species of dowitchers and Pectoral Sandpipers. Common Snipe were seen in increased numbers into May, and Soras were plentiful because of the wet areas created by the rains.

Our usual spring migration pattern – that of a slow, unspectacular trickle of migrants – had variations in the form of several 'drop-outs'. The first was of a large number of White-fronted Geese in late April which may have resulted from several days of dense fog; these geese normally pass far overhead in migration. Big drop-outs of passerines occurred on May 3 and 19, where Olive-sided Flycatchers, Western Wood Pewees, Western Tanagers and Swainson's Thrushes were especially noted; on May 23 there was a drop-out of Black-headed Grosbeaks, Yellow Warblers, and Cedar Waxwings.

And then on May 25 two Western Kingbirds and Vancouver Island's first Brewer's Sparrow were found.

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Common Grackle

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The sparrow (found by B. and M. McGrenere) was located by its distinctive canary-like song, consisting of a long series of varied buzzy trills. When seen, the long notched tail, buffy-white eyeline, whisker stripe, unstreaked buffy-white underparts, and slightly-streaked upperparts were apparent. Although the bird remained for only one day, it was photographed (M. McGrenere) and seen by a few experienced birders.

While searching for the Brewer's Sparrow on the next day, Hank van der Pol and Brian Gates heard very high-pitched 'tseet' notes and, finding the source, discovered a singing male Blackpoll Warbler! Although there are previous records for this species for Vancouver Island (a sight record for McLean Point on September 25, 1972, and another for Renfrew Road on June 18, 1974, for which the photograph taken is unavailable for confirmation), this should be considered the first confirmed sighting. The warbler was photographed (T. Zurowski) and seen by many experienced birders until May 27, on Jennings Lane, Saanich. A cyclonic low front originating off Mexico and reaching the interior of Washington and B.C. was the probable cause for the appearance of these rarities.

In late September, a similar front produced the same effect, when several more rarities from the Interior reached our area. Southern Vancouver Island's first Common Grackle was found in central Saanich on September 27 by K. Taylor and C. Harper, photographed by T. Zurowski, and seen by many observers until September 30. Other species to reach us were Clark's Nutcrackers, two Lewis' Woodpeckers, Willet, Buff-breasted Sandpiper, and, on October 13, Vancouver Island's first Forster's Tern and third Clark's Grebe.

The Forster's Tern, in adult winter plumage, was found by K. Taylor, photographed by T. Zurowski, and seen by many observers at the breakwall until October 27. The Clark's Grebe, found by B. McGrenere, was the second to be photographed in our area; the first was on April 23, 1985 at Fulford Harbour (L. Ramsay), with one more sight record on September 9, 1981 at Ross Bay (R.

Satterfield). The grebe (possibly two birds) was seen at the breakwall and at Esquimalt Lagoon until October 28; another was found on December 17 at French Beach (M. and V. Goodwill).

The surprisingly dry and mild weather in October and early November was responsible for numbers of late Semipalmated Plovers and warblers. Especially noted of the latter were Townsend's, Orange-crowned, and a very late Black-throated Grey Warbler on November 2 at View Royal; a Palm Warbler was also at this location, and a Common Yellowthroat, only the second winter record, was at UVic grounds during late December and early January.

The lack of rain prevented the normal flooding of fields, which resulted in the late return of numbers of ducks. Also late in returning were Ancient Murrelets in any numbers, and Snow Buntings were very scarce.

Mention should be made of species affected by cyclic declines or irruptions associated with seasonal food supplies. Of these, Evening Grosbeaks were scarce in summer, possibly because of looper die-off; they occurred, however, in above-average numbers in early winter. Steller's Jays remained in low numbers until September, when they bounced back considerably. Red-necked Phalaropes appeared in May in good numbers for the first time in years.

Special mention should also be made of other rarities found throughout the year. Iceland Gulls continued to be found at the Hartland Dump, two Brown Pelicans were sighted along the waterfront, a Red-naped Sapsucker was seen in Oak Bay, and of course the White Pelican on Portage Inlet in June. The Tree Sparrow(s) found at Quick's Bottom in October 1985 (B. Whittington) continued to show until March 27, 1986; a White-winged Crossbill was seen briefly at Swan Lake (M. Bently); and two White-breasted Nuthatches were sighted. The one at Metchosin (R. Williams) stayed from mid-November 1985 through March 15, 1986, and from November 16, 1986 through into 1986. Two Mountain Quail were shot on the Malahat, confirming that they do still exist here; however,



White Pelican

© Tim Zurowski

a feeder set up in the area to attract the birds has yielded no results to date. Vancouver Island's second Snowy Egret, an immature, was seen at Cowichan Bay by many experienced observers on November 18 and 19. A Swamp Sparrow finally appeared during the Christmas Bird Count on December 15 at Smugglers Cove, Ten Mile Point (B. Gates et. al.) And of strange occurrence were a Heermann's Gull in March and Sandhill Cranes in June and December.

1986 will be remembered as the year that four new species were added to the Victoria Checklist (Forster's Tern, Common Grackle, Blackpoll Warbler and Brewer's Sparrow), and the year that two parties had a combined total of 147 species on a Big Day in May! It will also be remembered as the second consecutive year in which the waterfront, especially the Ogden Point breakwall, has produced the best year's birding – see you there next fall!

More on "Lesser"

BY BRUCE WHITTINGTON

In the January/February issue of *The Victoria Naturalist*, page 10, Keith Taylor has written, "I had no idea of the identification problems and controversy that would arise!" After spending some time with the specimen collection in the B.C. Provincial Museum, I concur wholeheartedly, and would like to add further fuel to the fire.

There are 44 specimens of *Pluvialis dominica* in the Museum collection, of which one is a downy young, and one on display elsewhere. The remaining 42 specimens are the subject of this report.

In looking at the specimens, I attempted to identify them as to subspecies using the following three criteria:

1. Wing Chord Length:

Hayman, Marchant and Prater (1986) state that the wing chord length of *Pluvialis dominica dominica* (American Golden Plover) is in the range of 169 to 193 mm. That of *Pluvialis dominica fulva* (Pacific Golden Plover) is in the range of 152 to 173 mm. Of 42 specimens, 11, or 26% fall into the area of overlap. Prater, Marchant and Vuorinen (1977) state, "... the overlapping

dominica and largest *fulva* occur together in Alaska." This concurs with findings by Vaurie (1964), cited in Cramp (1983). It is clear that on the west coast, wing chord alone is not diagnostic, even in the hand.

2. Projection of Primary Tips Past Tertiary Tips:

Hayman et al indicate in both text and plates that in *dominica* the primary tips extend much further past the tertiary tips than in *fulva*. Taylor mentions that the projection in *fulva* is about half that in *dominica*. Some of the museum specimens are obviously separable by this criterion, but I found that many were not. Some were blatantly inconsistent. Taylor also mentions a difference in primary projection past the tip of the tail, but this is unreliable in museum specimens because of abuse and differences in preparator techniques. I have not examined birds in the field closely enough to comment from experience in this regard.

3. Plumage Differences:

Breeding-plumaged birds are the most difficult to separate (Hayman et al). I found that all birds of this group in the Museum collection were separable, however, using a combination of the first two criteria, and the following plumage differences: *dominica* (especially males) have blacker underparts, particularly on undertail coverts and flanks, as Taylor has noted, but also lack the barring on the flanks (usually concealed by the folded wing) which is evident in *fulva*. The patch of white on the breast by the

bend of the wing is usually more prominent in *dominica*, sometimes almost joining in the centre (Hayman et al). Further (though this is not without exceptions), *dominica* seems to have a larger head, and often shows a much more prominent white forehead, reminiscent of the helmet of horn on the forehead of a muskox. This is quite pronounced in some specimens.

In juvenile birds, the best distinction seems to be the general coloration of the head (particularly the supercilium), breast and underparts. Most authorities seem to agree that *fulva* is a much more golden bird than the greyer *dominica*. Taylor mentions a difference in the pattern of darker markings on the breast and upper neck, but I was unable to reach a conclusion on this point.

Using these criteria, I attempted to separate all birds in the collection as to subspecies. As mentioned previously, I was able to separate all breeding-plumaged birds, and found that there were 8 *fulva* and 6 *dominica*. In separating the juvenile-plumaged birds, however, I found that there were 11 *fulva*, 13 *dominica*, and 4 which were not separable. These four represented over 9% of the total sample, which supports the claim made by Hayman et al that 7% or more are not separable even "using all characters". (The fact that Taylor felt that there were only 4 adult *dominica* in the collection also affirms that positive identification of all specimens is not possible). The most interesting correlation I noted was that the juveniles, when separated using a combination of characters, fell neatly into golden and grey groups. The four which were not identifiable were all grey birds. This could indicate that the golden juvenile plumage of *fulva* may be a fairly reliable mark. I recalled that when in Japan at the end of August 1986, I saw a group of about 20 *fulva*, and all were very definitely buffy-gold to golden (in full sun at mid-day). A short 2 weeks later, I encountered similar birds at Martindale Road though I saw only three, and not four as Taylor reported, and noted that one may not have been a *fulva*.

The distribution of the specimens in the Museum collection is also interesting. Of 16 Interior specimens, two were unidentified, 3 were spring and 11 were fall *dominica*, and there were no *fulva*. (Godfrey [1986], however, does note a *fulva* from as far inland as Alberta!) Of 26 Coastal specimens, two were unidentified, 3 fall and 2 spring were *dominica*, and 11 fall and 8 spring were *fulva*. This would seem to indicate (although the sample size is admittedly small) that on the coast we might expect to encounter *fulva* more often than *dominica*. Virtually all specimens from the coast are from the Courtenay area and the Queen Charlotte Islands, however, and it may be that the distribution on southern Vancouver Island is quite different. Sight records for this or any area are less than reliable because often birds are not identified as to subspecies, and there is obviously considerable room for misidentification.

Taylor concludes his article by urging that all golden plover sightings be carefully reported, and identification of subspecies be attempted where practical. I fully support this move, because there is a distinct possibility that with careful observation we may discover new information about the distribution and migration patterns of the two subspecies. A large population of *dominica* winters in central and eastern South America, and it is possible that larger numbers of *fulva* migrate along our coast to winter in poorly birded parts of Central and South America than was previously known. It is important to remember that about 10% cannot be identified even in the hand, so in the field there will be even more cause for caution.

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- Thanks to David F. Fraser for assistance in researching this article.

Are There Two Species of Killer Whales in B.C.?

BY ROBIN BAIRD

Among those interested in killer whales, the apparent presence of two different "types" of killer whales in local waters, and what these "types" really are, has caused much discussion. These two types have been named "residents" and "transients" by Dr. Mike Bigg, a pioneering killer whale researcher.

Russian researchers distinguished two species of killer whales in Antarctic waters, based on 906 animals they "collected" in 1979. The new species was named *Orcinus glacialis*, different from the closely related *Orcinus orca* in morphology and in some aspects of behaviour and ecology. But does this apply to the situation in B.C.?

The resident killer whales here have rounder dorsal fins, travel in larger groups, eat different foods, and have different vocalizations than do the transients. Transient killer whales appear to feed mainly on marine mammals like seals and sea lions, whereas the residents feed mainly on fish. As well as being more pointed than the dorsal fin of residents, transients' fins seem to be slightly bulged at

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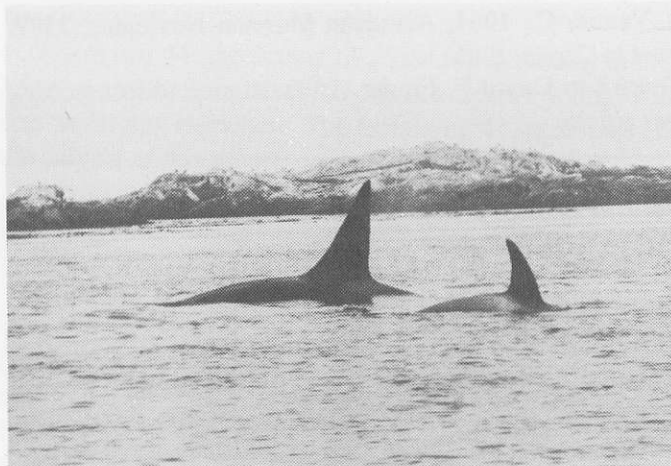
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the base of the leading edge.

The transients share the same ranges as the resident whales but appear socially isolated. Even when the two groups are present at the same time they do not seem to interact. Dr. John Ford found that all the transient pods share one dialect, whereas the resident pods each have their own dialects. Alexandra Morton has been documenting information on transient travel patterns, foraging and behaviour for the past several years and has perhaps documented more about them than any other researcher, but the transients are more difficult to study than the residents, because of their smaller groups and more erratic travel patterns. There are only about fifty of them along the B.C. coast, compared to the 277 resident whales, so even with several years of study the amount of information gained is still small.

The resident whales have definite ranges in which they travel. For instance, the "southern" residents range from Campbell River south to Puget Sound, out Juan de Fuca Strait and on to the west coast of Vancouver Island. On the other hand, the transients cover the whole B.C. coast, and some have been recorded from Alaska. In January, 1987, seven Alaskan transient whales were seen off Nanaimo, giving them a range of over one thousand miles. With more research being undertaken, a matchup with whales seen off California may soon be made.



Transient Killer Whales. Y1 (left) Q7 (right). Oak Bay.
© Robin W. Baird

From all the killer whale captures in B.C. in the late sixties and seventies, only two transient whales are still alive in captivity. Both are held at Marineland in Niagara Falls, Ontario, along with some killer whales captured off Iceland. A study of these whales and how they interact with the Icelandic whales they are with could, perhaps, help in determining how similar the two types are. Unfortunately what "type", or even if there are different types of Icelandic whales, is unknown. Perhaps each isolated population of killer whales around the world is different according to the local situation. While observing killer whales pursuing sea lions off the Argentinian coast,

filmmaker Jeff Foote noted that they actually preferred fish, and only hunted sea lions when the fish were absent from the area. This does not seem to correspond with observations of resident or transient killer whales seen locally.

In the hopes of one day contributing to the answer, our B.C. Provincial Museum is collecting the skeletons of any killer whales that have washed up on shore. The Cetacean Watch Society has also been involved for a year and a half in the search for more information dealing with resident and transient whales. Southern Vancouver Island is a good location for transient research due to the many seal and sea lion haulouts and to the generally mild water conditions. We are keeping track of all sightings in the Victoria area, and when possible, are trying to quantify the differences in travel patterns and dive times. Are our local whales two separate species, subspecies or races? Where did they come from, and which "type" inhabited the B.C. coast first? Only continued research will lead to more clues to the answers of these questions.

How can YOU tell the difference between resident and transient killer whales? Next time you see any, note how many there are, how close to shore they are travelling, the shape of the dorsal fin, and their behaviour in terms of speed of travel and feeding. Do they travel in a straight line, or do they follow all the contours of the shoreline? Best of all, get a good photograph of the dorsal fins of individual whales! Then contact the Cetacean Watch Society at 383-6722 in Victoria.

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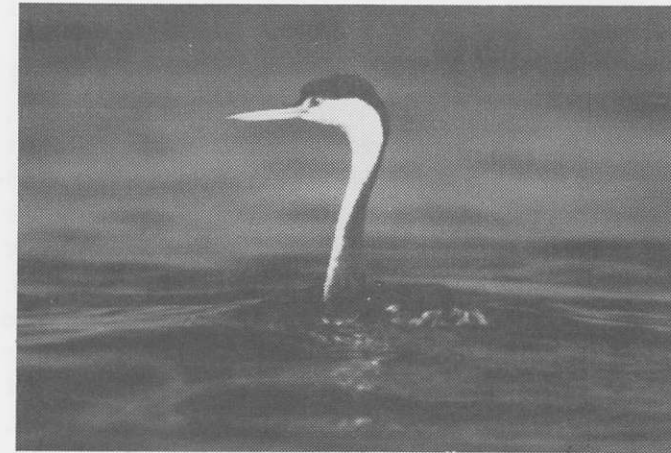
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Vancouver Island Fall Migration Bird Report Summary August 1 to July 31, 1987

BY DAVID F. FRASER and MIKE MCGRENERE

This is a brief summary of the 86 Fall Migration Bird Report for Vancouver Island. The report has been compiled by several people: (A) Loons thru Ducks – Jerry and Gladys Anderson, Mike Edgell; (B) Vultures thru Cranes – Bruce Whittington; (C) Plovers thru Puffins – Bryan Gates and Bruce Whittington; (D) Doves thru Thrushes – Mike and Barb McGrenere; (E) Catbird thru Weaver Finches – Lyndis Davis and Margaret Jeal. The original report is filed at the Provincial Museum and the V.N.H.S. library, and a copy is sent to the regional editor of *American Birds*.

The data for the report is extracted from sighting cards submitted from Vancouver Island birders. The report is only as complete as the information received, and birders are urged to submit sighting cards by the end of each month. Anyone wishing more information regarding sighting cards may phone Dave Fraser at 652-5934. Completed cards can either be brought to Victoria Natural History Society General Meetings or Birders' Nights, or dropped off/mailed to Swiftsure Tours Office, 119 - 645 Fort Street., Victoria, B.C., V8W 1G2. All cards are forwarded to the B.C. Provincial Museum and used in their records.



Clark's Grebe

© Tim Zurowski

LOONS thru DUCKS.

A CLARK'S GREBE was seen from 13 October to 26 October off Victoria Harbour, well described by M&BMc, and seen by numerous observers during the period. While there are several previous records, this is the first well-documented report for the area. L. Calvert found a dead dark-phased Northern Fulmar being eaten by two Bald Eagles at Bamberton Beach on 29 November. There were at least two American Bitterns during the period, one at Swan Lake from 7 September to 8 November (m.obs.) and one at Somenos Lake near Duncan on 13 November

(M&BMc). Cowichan Bay was an unusual location for a white-rumped dark Storm-petrel (Leach's?), seen on 13 October by D. Aldcroft and Colin Butt. A SNOWY EGRET seen at the Koksilah River Estuary by B. & R. Beggs was Vancouver Island's second record of this species. Three reports of Cattle Egrets were received, two on 22 November at the Cowichan River Estuary (B&MMc and J&GA), and 1 on 29 November, Wilson Road, North Saanich (P. Lally). Green-backed herons were reported from widely scattered areas on Vancouver Island north to Port Alberni. An immature IBIS (WHITE-FACED?) was observed on the lawn of a trailer park near Beaver Cove, Port Alberni by T. Lyon and B&MMc, Wayne Weber and Mike Force. A single Snow Goose was reported from Somenos Lake on 22 and 29 November (M&BM, K.Taylor). American Black Ducks were reported from their usual places, Esquimalt Lagoon, Goodacre Lake in Beacon Hill Park, and Holland Point.

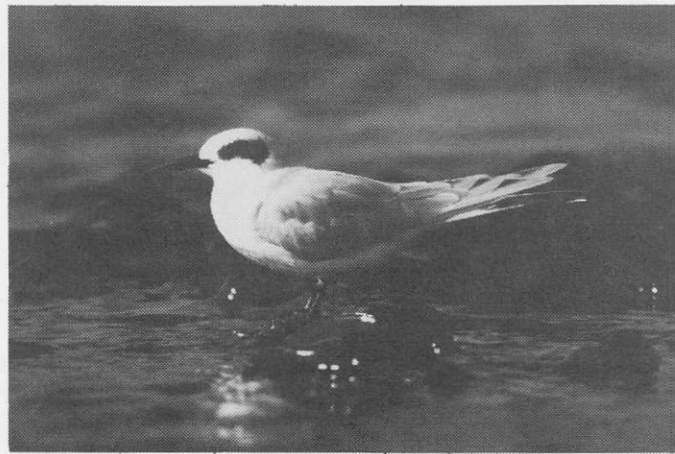
VULTURES thru CRANES

The peak of the Turkey Vulture migration took place after the middle of September to the beginning of October, with the last sighting occurring on 27 September in Central Saanich (B. Diakow). There were no reports of Rough-legged Hawks this fall. We received word that some of our resident Peregrine Falcons have probably been the result of eyries being established by Falconers introducing the birds in past years. Two MOUNTAIN QUAIL were accidentally shot in the Malahat Land District, providing the first tangible proof in many years that this species is still present on Vancouver Island. Unconfirmed recent reports suggest that observers should look (or listen this spring) for this species in suitable habitat in the Sooke Hills, the Malahat, Cobble Hill and on Salt Spring Island. A single Sandhill Crane was reported from Rocky Point Metchosin on 28 September by A. Macleod and R. Satterfield.

PLOVERS thru PUFFINS

Up to four Lesser Golden Plover were in plowed fields off Martindale Road, Central Saanich. Photographs taken indicate 1 "fulva" race bird and 2 or 3 "dominica" (m.obs.). Solitary Sandpipers were seen this fall (20 August to 11 September) at the Cowichan Estuary (DA), Cobble Hill (DA. M&BMc), and Martindale L Reservoir (DFF). An adult Whimbrel was seen on 2 and 3 October at Cattle Point Oak Bay (KT) and at the foot of Bowker Avenue in Oak Bay (J&R Satterfield). A well-described BRISTLE-THIGHED CURLEW was reported from Sidney Spit, Sidney Island by RS and M&A Elston on 11 September, providing Vancouver Island's third report of this species. Frustratingly, colour photos provided to the B.C. Provincial Museum proved to be inconclusive. Doug Kragh reports a HUDSONIAN GODWIT and a Marbled Godwit feeding together at Grice Bay near Tofino on 29 September, allowing for direct comparison between the two species, and providing the 5th sighting for Vancouver Island of Hudsonian Godwit. No reports were received of

Ruddy Turnstones during the fall migration. A Red Knot was seen on 23 August at Cordova Spit, Central Saanich (KT and C. Harper). Both Bairds and Pectoral Sandpipers showed up in reasonable numbers, with 27 and 36 reports respectively. Single Sharp-tailed Sandpipers were seen at Martindale Reservoir and at the Cowichan Estuary from 9 September to 23 September. Stilt Sandpipers passed through from 29 August to 10 September, with a high of 3 birds at Martindale L Reservoir from 7 to 10 September. Only one Buff-breasted Sandpiper was seen on 13 September at Martindale Flats (ALM, RS and BW). In total there were 8 reports of Little Gull received, adults at Clover Point and Active Pass, and juveniles at Ogden Point, Victoria and Departure Bay, Nanaimo – viewings scattered from 13 August to 29 September. Earlier concentrations of Ring-billed Gulls departed from the Cowichan Estuary, and the 9 reports received were of 1-3 birds from there, Royal Roads, the Sooke River, Cordova Spit and the Victoria Golf Course. A SLATY-BACKED GULL was reported on 11 and 12 November from Port Hardy on Northern Vancouver Island, and thorough and complete written descriptions and photographs were taken, providing the second record for Vancouver Island and British Columbia. A FORESTER'S TERN seen from 13 to 18 October (KT, photo Tim Zurowski, m.obs.) provided the first record for Vancouver Island. One report of Cassin's Auklets was turned in, 10 birds on 8 November near Ucluelet. Rhinoceros Auklets were found in large numbers off Clover Point on 2 August, with RS reporting 1350+ birds there. There were 2 reports of single Tufted Puffins at Clover Point on 13 (KT) and 15 August (RS).



Forester's Tern © Tim Zurowski

DOVES thru THRUSHES.

One Barn Owl was reported on 23 August, Martindale Road (J. Tatum). Northern Pygmy Owls were reported from Goldstream Park (August 21, 27 & 29, DFF et al.) and one heard 13 September, along Durrance Road (ALM, BW, RS.). Barred Owls were reported several times from W. Saanich Road and the UVIC Woods. Two Short-eared Owls were reported, 1 on 30 November from Munroe

Road, North Saanich (E. Lofroth, T. Geernaert) and one from Mt. Tuam, Salt Spring Island on 19 October (DFF, L. Ramsay). 7 Purple Martins were at Swan Lake on 7 September (JT). Five reports of Bank Swallows were received, all single birds. CLARK'S NUTCRACKERS were unusually well reported, with a single bird sighted at the Pacific Horticulture Center, Saanich on 27 September (C. Sherman), at Taylor Road, Metchosin on 28 September (G. Voss), and in and around the Beacon Hill Park/Ross Bay Cemetery/Moss Street area 1, 4, 5, 7, 8 October (m obs.) – all the same bird? Two on Mt. Tuam, Salt Spring Island on 19 October were the first records for Salt Spring Island (DFF, LR), and there was 1 was seen in Saanichton on 9 November (LRR). A White-breasted Nuthatch, Vancouver Island's fifth record, was at Henderson Road, Oak Bay (J. Alex McCarter). A highcount of 27 American Dippers at Goldstream Prov. Park, on 22 October quickly dwindled to 18 birds by 5 November (DFF). One American Dipper was also seen on 30 November at Muir Creek, west of Sooke (several obs.). Western Bluebird flocks that were reported were 12 on 28 October, Rocky Point (ALM, RS) , 2 on 30 September at Pears Road Metchosin (KT) and 8 on 1 October, Pears Road (L. Roberts).

CATBIRDS thru WEAVER FINCHES

A Red-eyed Vireo was seen and heard at Goldstream Prov. Park on 2 September (DFF). A Palm Warbler was reported from Amphitrite Point near Ucluelet on 27 September, and another on 1 November from Stewart Road Victoria (B&MMc). Vancouver Island's second CLAY-COLOURED SPARROW was reported from Comber's Beach, Pacific Rim National Park on 9 November (L. Koch, M. Wynja, Mike Force, photo R. Chaundy et al.). Again only one Vesper Sparrow was reported from the Cobble (Hill) Meadows, on 13 September (ALM, BW, J&RS). Two White-throated Sparrows were reported, 1 on 1 October, Island View Beach Road (R&JS) and 1 at 9350 Cresswell Road, N. Saanich (BB). Harris' Sparrows were represented by three reports, 1 from Penrhyn Street, Saanich 21-26 September (R. Mackenzie-Grieve), 1 on 24-25 October, Prospect Lake Road (G. Calvert) and 1 on 28-29 October, Cresswell Road N. Saanich (BB). There were 6 reports received of Lapland Longspurs from 20 September to 2 November all from open, seaside habitats. One Snow Bunting was seen on 2 November on Mt. Tuam, Salt Spring Island (DF&R Fraser, N. Madsen). One Yellow-headed Blackbird was at a feeder on 17 October, near Lake Cowichan (BD). A COMMON GRACKLE, the third confirmed record for Vancouver Island and the first for the Victoria Checklist Area, was found on 27 and 30 September (G&JA, ALM, JRS, photo TZ).

Trevlac Trifles No. 3 Goose or Goose or Gander?

BY GIFF CALVERT

"Canada Goose – *Branta canadensis* – (many varieties). Sexes alike." So say Bent, Coward, Godfrey, Guiguet, Peterson, Tavener, Van Wormer, Van Wormer, and maybe others. But perhaps not so.

Nine different pairs of Canada Geese have nested on Trevlac Pond over the past twelve years – not always successfully – including one where the goose was a smallish Aleutian (?), very smart with her wide white choker contrasting sharply with her slender black neck. She mated with an "ordinary" gander and nested three years running, but failed to raise any young. One year three pairs nested, not very amicably and as a result not profitably, but usually only one pair does so, depending on how territorial the ganders are. Many other non-breeding pairs and singles have spent their summers with us, and my remarks apply to all of these, but only to them.

The geese spend a great deal of time cropping the lawn in front of the house, from early March when they first arrive to the middle of July when, the moult and fledging completed, old and young all leave. They like to doze there also, but do their bathing and mating in the deep water just off shore.

The only way to determine sex initially is when breeding takes place. The gander "treads" the goose – of that there is no doubt – and occasionally his maleness is confirmed by the sight of his sex organ, a feature which is, as far as I know, confined to our waterfowl. After watching a few such incidents it soon becomes quite apparent that the bills of the two birds are quite different. The male has a straight "greek" profile, whilst the female has a somewhat pert, slightly concave one (see photos). As a result her beak looks, and seems to be, thinner at the base. His thicker one gives him a heavier, fiercer gander look. This difference is not apparent in the young goslings: the shaping seems to take place with maturity.

Being able to differentiate between the parents allows for, and confirms, some pertinent observations. For



Canada Goose, female © Tim Zurowski

instance: the gander is not necessarily the larger of the pair, although the goose seems to have the slenderer neck, whatever her size; only the goose incubates, the gander most of the time sleeping, feeding and grooming, as much as 150 yards away from and often out of sight of the nest, very rarely guarding it; both birds stand on guard after the goslings have hatched, but the gander takes the longer shifts; when swimming in single file with the young, either parent can be in the lead; the goose, surprisingly, is more apt to defend the nest and attack intruders after the eggs have hatched. In one case when a mink destroyed the eggs, the gander calmly swam around the nest which was on top of a muskrat house, whilst the goose violently, albeit warily, harassed the enemy; on another occasion when an otter attacked the family in broad daylight, killing an almost fully fledged gosling, it was the goose who retaliated, and paid for her efforts with her life. (Amazingly, the gander immediately took the three remaining young on a four mile trek – none of them being able to fly – down Prospect Lake Road, West Burnside and Helmcken Roads, and across the TransCanada Highway to Portage Inlet)

Some of the literature indicates that there is a difference in the relative sizes of the bills between the local "honker" (*canadensis*?) and the western (*occidentalis*?) and the lesser (*parvipes*?) subspecies (and others which probably occur here) – the latter having the "smaller" bill. The existing doubts about the overlapping of subspecies and their breeding ranges, and in addition the possibility of further subspecies, may indicate that some cross breeding may take place. There is indeed a great deal of confusion for the amateur: cf. "*leucoparia*" in Guiguet means "lesser", while in Peterson and Godfrey it means "aleutian", etc.

It might be that our geese are from various subspecies and maybe even a mixture of them, as they differ considerably in size but not so much in colouration, except for the "Aleutian" (?). Even if they are, it would be unlikely that all our ganders are, say, "western" or "honker", and all our geese "lesser", who have the supposedly smaller bills. A very confusing state of affairs.



Canada Goose, male © Tim Zurowski

Growing Native

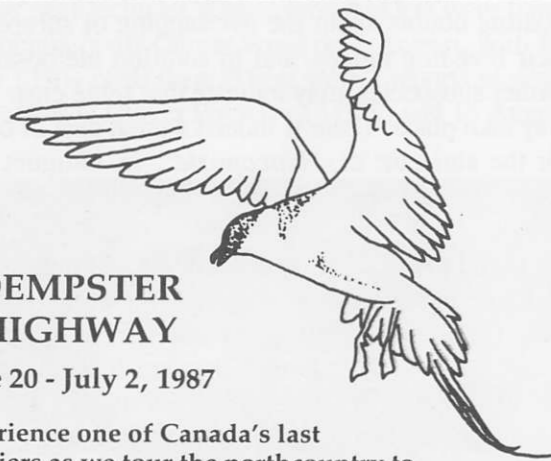
BY DAVID F. FRASER

Indian Plum (*Oemlaria cerasiformis*) in the Garden.

One of the earliest shrubs to bloom in the spring, Indian Plum or Osoberry flowers in February in mild years, with delicate axillary racemes of white flowers ornamented with lime-green bracts. It is this early flowering habit that makes *Oemlaria* (also *Osmaronia*) a useful shrub in our gardens.

Twigs cut early in the new year can be forced in the house (Clark 1976) but beware, some people find the smell a little overpowering. This species flowers well in deep shade, providing it is given adequate moisture, and can brighten up a rather dull corner of the winter garden. In shady locations the leaves grow large, up to 25 cm long, making it a lush green accent plant in early spring. An additional attraction is the fruit's popularity with thrushes and cedar waxwings as it ripens. If it is fruit you want, make sure you plant both male and female shrubs.

If space is limited, prune after the shrub flowers, for flowers are produced on last year's wood. Everett (1964) reports that the species benefits from a mulch or top dressing.



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Propagation.

Indian plum can be propagated by seed, cuttings, layers or by cutting off suckers (Bailey 1920). Hardwood cuttings up to 30 cm. long will root direct stuck into the garden in October-November (Everett 1964). Seeds require lengthy cold stratification, 120 days being considered optimal (Mirov and Kraebel 1939, Dimock and Stein 1974); in the garden it may take two years before a seed germinates. If you wish to collect seed, it is probably advisable to put a cloth bag or nylon stocking over the developing fruit so the birds don't beat you to it.

Fortunately cuttings root easily and suckers are easily come by, and these provide a quick source of new plants.

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Only Way To Fly

BY MARGE CROWTHER

For several years our Royal Oak district has been plagued by blow-flies in nests of swallows, and we understand that bluebirds are having the same problems.

About mid-June in 1984 we had one nest of swallows hatch, and when the tiny birds were about one week old, we noticed a House Sparrow looking out of the entrance hole, with one dead swallow on the ground below and three live birds in the box. We glued a smaller-sized hole over the entrance (provided by Charlie Trotter), which kept the sparrow out, but one week later the mother swallow was acting strangely, looking in the door but refusing to go in. We looked in at the birds through the hinged roof, and the birds looked very sick, swaying back and forth with small white specks on the heads. At this point we decided to try something our budgie had once required, Hagen Bird Bath for caged birds. This is used to kill mites, etc., and is labelled completely harmless to birds. It was a bit late by this time and two birds did not survive, but one was much improved, and the mother once again fed it and eventually it flew.

Next year we were unaware that a nest of Barn Swallows had a blow-fly problem until all had died, but then we watched the nest, and when the second batch looked a bit strange we sprayed; the mother resumed feeding them, and all survived. In 1986, we moved more quickly with two nests, spraying above the nests and allowing the spray to mist downward. This time we had two nests, 100% healthy.

This method has been working well for our swallows, and perhaps could be the answer for the bluebird problem which we have locally. (See the Victoria Naturalist, Nov./Dec., 1986).

Birding Field Trip

January 17, 1987

BY ANNE KNOWLES

The day was overcast, with a temperature of 5° and a calm sea, when 16 birders met at Island View beach.

On the sea we saw the usual wintering ducks and seabirds, but in reduced numbers. Among others Common Loons, Common Goldeneyes, Horned and Red-necked Grebes, Buffleheads, Oldsquaws, and the three species of Scoter were seen. Black Oystercatchers were flying from the San Juan islands to our shores.

On the land we flushed a nice little flock of Golden-crowned Sparrows and the other usual dickey birds - a Bewick's Wren, Song Sparrows, Rufous-sided Towhee, and a small group of Golden-crowned Kinglets and one busy Ruby-crowned Kinglet.

I think the most interesting sightings were the raptors - several Bald Eagles, a Merlin streaking along near the wooded area, a pair of Red-tailed Hawks between field and beach, and an immature Cooper's with his long tail and an immature Sharp-shinned with his shorter tail, scattering all the small birds in sight.

At noon most of the birders called it a day as the weather was deteriorating, but a hardy few went on to Wallace Drive on the chance of seeing the Short-eared Owl and other interesting birds that had been reported - but no luck.

A total of 34 species was seen.

A big "Thank You" to Mike Bentley for his expert and thoughtful leadership and the knowledge which he gave so freely, making it such an enjoyable day.

Volunteers Wanted

Swan Lake Christmas Hill Nature Sanctuary is seeking volunteers interested in helping with natural history programmes and keeping the nature house open on weekends. Natural history programmes are very simple to learn and the time commitment is only 1-2 hours per week. The programmes span grades from one to seven. Anyone interested can call Fran Benton at the Nature House, 479-0211. The weekend receptionists at the Nature House keep it open from 1-4 Saturdays and Sundays. These volunteers greet the public and share their knowledge of the local area and its flora and fauna. If you are interested please call Jo, McGregor, 477-5026.



Christmas Bird Count Party

On December 20th after a day spent, in the warmest weather in years, checking the numbers and species of birds for the local Christmas Count, the "counters" enjoyed a fine pot-luck supper. This was held at the Windsor Park Pavillion. Anne Adamson did her usual excellent job as covenor and table decorator. Many Club members brought the delicious food for us, including a fine cake beautifully decorated by Margaret Mackenzie-Grieve, and much help was provided to Anne by the Tuesday group. Mike Shepard coordinated the results of the count and we heard reports from many of the team leaders.

Sally Hamill

Upcoming Programs

Please meet at the location indicated for each trip. No cars can be left at Mayfair Lanes. For field trips bring a lunch and be equipped for changes in the weather. **Always phone the rare bird alert: 382-5562 the week before** a trip you plan to take in order to obtain full particulars or details about changes (sometimes unavoidable) that have been made. ON V.N.H.S. trips participants usually pool vehicles to reduce parking problems and costs. A considerable fuel bill can run up in 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.

Saturday, 7 March: Nature Walk in Goldstream Park. Park Naturalist Bill Spriggs would like to introduce you (or reacquaint you) with some of the Nature Trails in Goldstream Provincial Park. Meet at the Picnic Shelter, Goldstream Park. 9:00 A.M.

Tuesday, 10 March: ". . . be ye therefore wise as serpents . . ." - the facts and fabrications of snakes from the tropics to B.C. to the Northwest Territories. An illustrated talk by Karl Larsen, M.Sc. Annual General Meeting will follow. Increase in fees for 1988 to meet the cost of rising FBCN membership will be discussed. Newcombe Auditorium, B.C. Provincial Museum at 8:00 P.M.

Sunday, 15 March: Birding at Wallace Drive/Keating X-Road to noon. Meet at Mayfair Lanes at 8:40 A.M. or the leader at 9:00 A.M. at Keating X-road opposite Bryn Road. Parking limited. Leader Bruce Whittington.

Thursday, 19 March: "Peaceful Afghanistan" - slide show by John Cowlin. The Thetis Lake Nature Sanctuary Association. Newcombe Auditorium, B.C. Provincial Museum at 8:00 P.M.

Wednesday, 25 March: Birder's Night. "The Trash Birds of Costa Rica", an illustrated talk with Dave Fraser and Leah Ramsay. B.C. Provincial Museum Classroom via the Main Doors. 7:30 P.M.

Saturday, 21 March: Botany Trip to Mount Manuel Quimper with Adolf and Oluna Ceska. Meet at Helmcken Park and Ride 9:00 A.M.

Botany Night is held one night per month on the second Thursday.

Saturday, 28 March: Birding at Cordova Spit. Meet at Mayfair Lanes at 8:40 A.M. or the leader at the K.O.A. campground Mt. Newton X-road 9:00 A.M. Leader - Eric Lofroth.

Saturday, 11 April: Botany Trip to Observatory Hill with Adolf and Oluna Ceska. Meet at the bottom of Observatory Hill at 9:00 A.M.

Sunday, 12 April: Birding at Witty's Lagoon. Meet Helmcken Park and Ride at 9:00 A.M. or Witty's Lagoon parking lot at 9:30. Leader Charles Harper (382-4592).

Tuesday, 14 April: 'The Galapagos - a Naturalist's Paradise', an illustrated talk with Mike Jackson. General Meeting will follow. Newcombe Auditorium, B.C. Provincial Museum at 8:00 P.M. All welcome.

Thursday to Monday, 16-20 April: Birding at Willapa National Wildlife Refuge, Columbia River, Washington. Camping at Fort Canby State Park or motel accommodation at Llwaco. Many warblers and shorebirds in the area. One day there will be a hike on mud flats and sand dunes to look for Snowy Plovers. Leader: Dave Aldcroft. Contact Dave a week before if you intend joining him. 743-3487.

Thursday, 16 April: 'Above the Arctic Circle' - a slide show with Jessie Woollett. The Thetis Lake Nature Sanctuary Association. Newcombe Auditorium, B.C. Provincial Museum at 8:00 P.M.

Friday, 17 April: (tentative date) - Join Leon Pavlick to see the pink lilies at Sutton Creek, near Honeymoon Bay. Check the Rare Bird Alert the week of 6-10 April in case time adjustment is needed due to an early or late season. Meet at Mayfair lanes 9:00 A.M.

Wednesday, 22 April: Birder's Night. Ptarmigan Habitats with Mike McGrenere, followed by a workshop on spring bird calls. 7:30 P.M. at the B.C. Provincial Museum Classroom via the Main Doors.

Saturday, 25 April: Birding at Nanaimo. Meet Helmcken Park and Ride 8:00 A.M. Bring lunch. Leaders Lyndis Davis (477-9952), Anne Knowles (477-3684) and Graham Gillespie.

Sunday, 26 April: Spring Wildflowers on Camas Hill with botanist Terri Suttill (384-3588). A short hike (20-25 mins.) on a steep trail. Meet at Helmcken Park and Ride 9:00 A.M. or at pull-off on side of Sooke Road at Kangaroo Road at 9:30 A.M.

Tuesday and Wednesday, 28 & 29 April: Birding Sidney Island with Swiftsure Tours. Contact Mike Shepard (388-4227 or 658-5850) by April 16. Cost \$22.00 for 4 hours. Bring Lunch. Meet 10:00 A.M. at boat-ramp behind the Sidney Hotel.

Some upcoming May Programs . . .

Saturday, 2 May: Botany trip to Mount Tzouhalem, near Cowichan, with Adolf and Oluna Ceska. Meet at Helmcken Park and Ride 9:00 A.M.

Sunday, 3 May: Cowichan Estuary Birding with Bryan Gates. Meet at Helmcken Park and Ride 8:00 A.M. or Robert Service Memorial at 8:30 A.M.

Sunday, 10 May: Birding at Tugwell Lake.

Saturday, 23 May: Botany trip to South Wellington and Nanoose Hill just south of Nanaimo with Adolf and Oluna Cesks. Meet at Helmcken Park and Ride 8:00 A.M.

CONTRIBUTORS are encouraged to include photographs along with their articles. We can reproduce from slides but prefer 4" x 6" colour or black and white prints. The composition and contrast between elements should be strong enough to 'hold up' in black and white printing.

Welcome To New Members

- Nov. 3, Howard and Maureen Burke, or Windermere Place, who were looking forward to meetings and field trips.
- Nov. 6, Keith Gibbens, who is working hard to preserve plant and bird life in Beacon Hill Park. He lives on Convent Place, near the Park.
- Nov. 11, Mary Gordon, of Sinclair Road.
- Nov. 11, Peggy Price, who lives with Del Thyer on Livingston Avenue.
- Nov. 11, Brenda Trotter, of Agnes Street, whose interest is birds.
- Nov. 11, Mrs. F. M. Sinclair, of Burton Street.
- Nov. 13, Eileen M. Anderson, of Keith Place.
- Nov. 17, Joan and Doug Manders, and children Blake, Glen and Chelsea, of Hampshire Road. They are especially interested in nature activities for children and families.
- Nov. 24, Mrs. Catherine Skinner, of North Dairy Road.
- Nov. 24, Sister Betty Janelle, of the Sisters of St. Ann, Queenswood House, whose interest is marine biology.
- Nov. 26, Glenys Hughes, of Newport Avenue, whose hobby is photography.
- Nov. 27, Mrs. Mavis V. Munday, of Monterey Avenue.
- Dec. 9, Bruce G. Frederick, of Jasmine Avenue.
- Dec. 9, John H. Steele, of Oswego Street, interested in birds and botany.
- Dec. 9, Elaine J. Wright, of Fort Street.
- Dec. 9, Thelma Landon, of Admirals Road.
- Dec. 9, Enid and Gord Mallory, of Parker Avnue.
- Dec. 22, Dorothy Coutture and family, of Quadra Street, who are botany and birding enthusiasts.
- Dec. 24, Cliff Daynes of Duncan.
- Dec. 24, Alan Clews, of Parker Avenue.
- Dec. 28, Charlotte D. Fee, of Lorne Terrance, whose main interest is birds.
- Jan. 9, Alan C. Nicholls, of Wray Avenue, rural Victoria, who likes birding and botany.
- Jan. 12, Bill McKee, of Dingley Dell, Esquimalt, a novice birdwatcher, interested in workshops and field trips for birding, botany, and marine biology.
- Jan. 13, Lorene L. Kennedy, of Beckton Road, a marine biology enthusiast.
- Jan. 13, Debra Green, of Faithful Street, whose particular interests are birds and botany.
- Jan. 13, Michael and Monica Jackson, of Panter Street; their interest is general (marine, geology, plants, animals).
- Jan. 14, Faye Mogensen, of Oldfield Road (rural).



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We regret the delay in preparing this issue. Its volunteer staff are working to improve the process!
