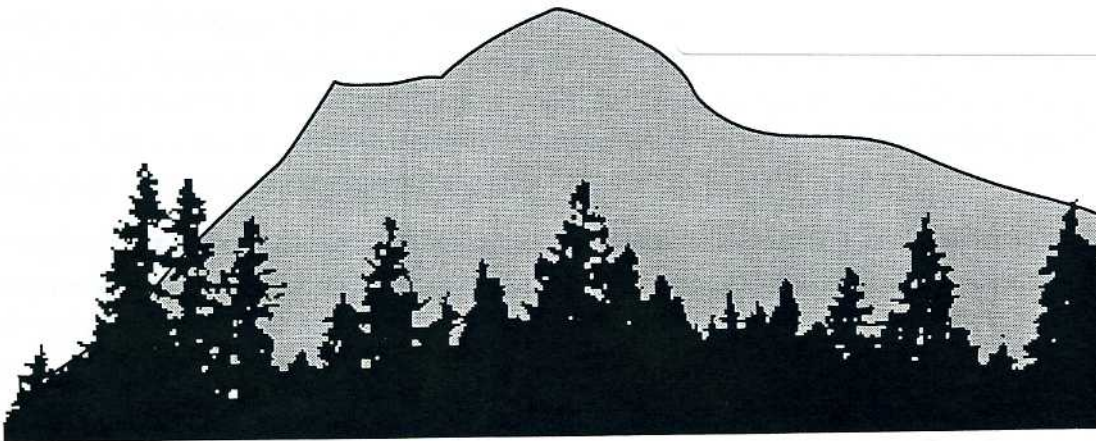

*The Friends of Mount Douglas Park
Society*

Newsletter

September 2001

'04 Maurice Claude
2200 Lorne Tce
Victoria V8S 2H8 B.C.



The Proposed Gordon Head Trail Connector

You may have read in either the Times/Colonist or the Saanich News that the Municipality plans to create a connecting trail between Gordon Head and the Lochside Trail. The thinking is that it would be a quick and convenient route for cyclists and pedestrians moving between the east part of Saanich and the Peninsula spur of the Galloping Goose Trail.

As presently proposed, the connector would run most of the way along existing streets such as San Juan, Elnido, Cedar Hill Road (in part), and Parkside Crescent, through to Glendenning, down Mount Douglas Cross Road to Blenkinsop and thus via Lohbrunner Road to the Galloping Goose. On reaching Cedar Hill, westward-bound pedestrians (but, we have been assured, definitely not cyclists) would have the option of going through the Park down to Blenkinsop instead of the longer way through Parkside Crescent. Alternatively, they could enter the Park at the end of Glendenning.

Asked by the Planning Department for the Friends opinion of the project, we replied that we welcome the prospect of more people using the Park, and commend the initiative as a major step forward in providing people with alternatives to the car. At the same time we recommended that provision be made for an information display and secure bicycle racks at the Glendenning entrance, so that people are aware that bicycling is not permitted in the Park. These measures will lessen the danger of cyclists entering the Park and damaging the fragile systems that exist within it. We also pointed out that certain arrows on the map submitted by the Planning Department might be taken to suggest that cyclists would be allowed to enter the Park at the Cedar Hill fire road, at Blenkinsop, and at Glendenning. Accordingly, we requested that these arrows be removed from subsequent diagrammatic presentations of the plan.

We also pointed out that a number of residents in the Parkside Crescent area have expressed concern about the proposal. Two members of the Friends executive attended a meeting of residents there, to present the position we have taken, and to suggest that they approach the Planning Department directly with their reservations or objections. This, we learned, they are very actively in process of doing.

Memorial Benches

In earlier days, the City of Victoria intended to locate a cemetery in the Park. Fortunately, the distance of the Park from the city limits at that time led to a cancellation of the plan. In recent years, however, Saanich Parks Department has been receiving applications for permission to place memorial benches in the Park, at points that their donors deem suitable. To keep ahead of this development the Department has sought to identify places where the siting of benches might be sanctioned, and have submitted their proposals to us for consideration.

Our conclusions coincided closely with the Department's proposals. In brief, they were to the effect that, to avoid affecting the ambience of a natural park, benches should only be sited in locations where human construction is already in evidence. More specifically, we are not opposed to the siting of one bench on the path from the main parking lot down to the beach (in replacement of a bench already there), three others at suitably scenic points on Churchill Drive (the road to the summit), and two on the viewing platform at the summit parking lot.

In this connection, it should also be mentioned that we are opposed to memorial plantings of tree species that are not native to the Park. An example of one such, an aspiring redwood, can be found in the main parking lot near the picnic area.

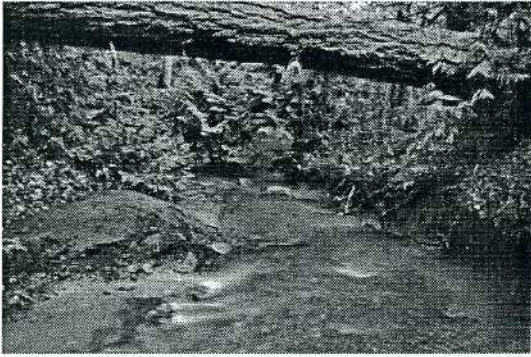
Restoration of Natural Systems

The Restoration of Natural Systems diploma/certificate has been developed to disseminate information about environmental restoration and to provide practical background knowledge, training, and skill development for those working or planning to work in areas related to restoration of natural systems.

Courses are offered in a variety of formats and schedules in order to meet the needs of busy people living in and outside the Victoria area.

For more information, call 250-721-8463 or e-mail pfaulds@uvics.uvic.ca

The Creek

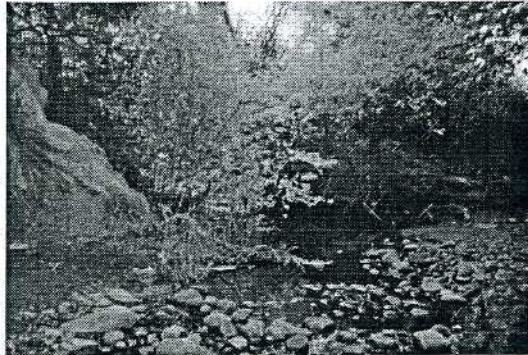


On May 31, 2001 we were given a field trip to a number of local stream restoration sites by Patrick Lucey and two of his graduate students. He uses engineered wetlands to improve storm water quality and to naturalize the drainage hydrology. One of these projects is on the Douglas Creek watershed—the large infill development at Tyndall is planned to have an engineered wetland to detain and

treat stormwater from the new development and, as well, from some of the adjacent existing developments.

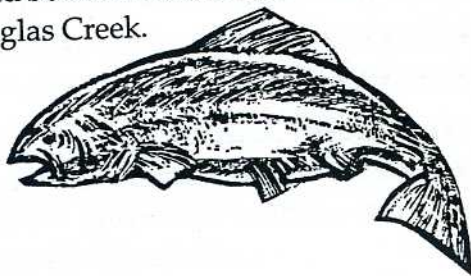
Unfortunately, the more stormwater that is treated in a detaining system, the more surface area is required for the treatment, and surface area costs a lot of money on the Douglas Creek watershed. In the Tyndall development, creativity has prevailed and we look forward to improved water quality/hydrology in the Creek.

Previous development in Saanich, as in most municipalities, did not include any environmental considerations for stormwater management: the municipality simply supplied a means of conveying water off the landscape— a network of pipes that eventually drain into some low-lying natural system, be it stream, lake or ocean. The result has been disastrous—the extirpation of salmon stocks in waterbodies adjacent to urban and agricultural areas, and on our beaches. Thanks to a Chief Engineer who takes the long view, Saanich is one of the communities in the Pacific Northwest that is moving toward stormwater management that does not destroy the environment. We like that, and applaud the direction he is taking.



In July, Saanich Engineering proposed changes to the Subdivision Bylaw to cover the discharge of water from new developments. The intent is to improve the quality of water discharged and to slow down the discharge so the pipes are not subjected to massive pulses of water after a storm: excellent news for the Creek! Unfortunately, the initial wording of the bylaw would have relegated Douglas Creek to some second tier of streams in the municipality. After some discussion, it was agreed to change the wording so that the highest standards contained in the bylaw can be (arguably) applied to any new subdivision which discharges water into a creek. It is important to see how this provision will be interpreted in the "real world."

The Capital Regional District has just come out with an Enhanced Model Storm Sewer bylaw which provides a framework of Best Management Practices for municipalities. Copies have been sent out to all municipalities, and the CRD has asked each to provide a planner and an engineer to sit on a working group that will define how the bylaw works. A municipality can adopt the bylaw fairly early, with certain gaps, and then work to fill those gaps according to individual municipal choices. Adopted and applied well, there could be room for alternatives that would support salmon-bearing streams such as Douglas Creek.



Meanwhile back at the stream . . .

After we had finished up the field trip with Patrick, Tom Rutherford and I picked up the egg cassettes that still remained in the creek. We didn't have the same spectacular egg-to-fry results that we had last year, but they were still okay. Out of 2000 coho eggs in the eyed stage, transplanted in egg cassettes, 236 did not hatch out of the eggs and 21 hatched but did not leave the cassettes. Eighty-seven percent (1743) hatched out and moved out into the stream.

I mentioned in the last newsletter that we first saw the emergent fry on March 23, 2001. Brood-year-2000 fry were regularly seen in the creek up to and beyond the first fish kill on May 6. I set fish traps at the regular spot on May 20 and picked them up on May 21. I picked up the first brood-year-2000 fry at 59 mm nose-to-fork length.

For some reason the small fry from brood-year-2000 were seen outside the traps but were not going in. Similarly, while setting traps on July 1 I saw fry in the pools but not in the traps (with one exception—a brood year 2000, 64 mm coho fry. In the same trap there were also two dragonfly nymphs).

Dragonfly nymphs are truly awesome creatures. They are fitted out for their aquatic stage as voracious predators, equally at home on the creek bottom or rocketing through the water. I'm surprised they didn't eat the coho fry—they were about the same size. As a water quality indicator, dragonflies are rated as moderately pollution tolerant. I hadn't seen any in the creek before this, so they were a welcome surprise.

I have been away most of August, with only one chance to walk the stream since I have been back. I didn't see any fry that trip. I will slip some traps in at the first opportunity and try and get a more comprehensive idea of how many fry survived this summer.

We have some coho fry (brood year 2000) from Goldstream put aside for us, (to transplant if our summer survival numbers don't look promising). If you are interested in helping out on the transplants, give me (Bob Bridgeman, 477-7464) a call and I will keep you informed of times and places.

If we do another coho fry transplant, we will be able to keep their life histories separate, since fry that hatch from eggs in the stream will have their adipose fins entire, while those hatched at Goldstream have their adipose fins clipped off (thus identifying them as hatchery fish). A transplant permit is also in place to allow the transplant of chum into the creek.: whether we carry it out this year will depend on there being sufficient chum returns at Goldstream to provide fry and eggs for us.

We would also like to transplant chum salmon carcasses into the creek, to try to replicate the natural nutrient regime. The more scientific (and costly) approach would require establishing the current nutrient regime—that is, recording urban nutrient input in the spring and summer—and comparing it to the more natural input in the fall and winter (when the marine derived nutrients wash out of the rotting salmon carcasses). Data is scarce, expensive and time-consuming to generate, so we take a less than scientific approach by discovering how best to keep the carcasses in the stream, and watch for changes in the invertebrate population in the creek as indicators of a change in nutrient regimes.

Odds and Ends

Some of you will have noticed the new "trash accumulator" at the weir. It looks promising doesn't it? The "as is" design requires very little modification to sop up, or skim off the floating pollutants. What we need now is a schedule for removing garbage/pollutants, as well as provision for storing the garbage. With the support we're getting from municipal staff and the Stormwater Committee, things look promising.

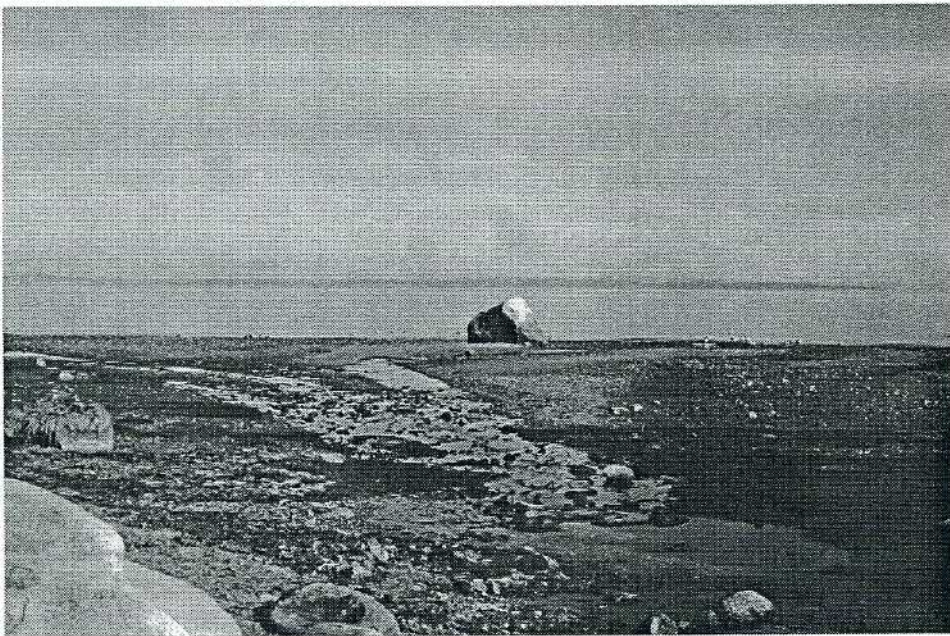
On June 17 there was a sewage spill into the creek from the Ash Road lift station. There are several backup systems in the station to prevent spills—auxiliary and backup auxiliary generators in case of power failure, a deep well for sewage to spill into and thence be removed by pump trucks, and a radio telemetry warning system. In this case it was a pipe that had failed at the station, for which there could be no backup provision. The pipe has been replaced with something more durable: this makes the system as foolproof as possible. A municipal crew worked round the clock to make the repairs and clean up the mess. Hard to say what the lasting effects, if any, will be. Conventional wisdom has it that the sewage, in limited amounts, has little effect on the ecosystem. Unfortunately, the nasty effects from household hazardous products in the spill are possible. On a walk up the stream the following day, I spotted fish that had been dead for some time, but no fresh victims.

Saanich Engineering Services has a student on a work term who is taking some of the data from the hydrometric station and combining/comparing it with day-by-day weather data to connect the patterns of climate and hydrology on the developed watershed. This synthesis is something we've been wanting for a long time. It will fit in well to the mid-project reports that are due our funding bodies.

I walked the stream from Cordova Bay to Ash Road with soil scientist Brian Maxwell in early April of this year. The walk was both entertaining and informative. Just upstream of the mouth, the stream has eroded down into a formation that seems to precede the last glaciation. Not much in Gordon Head, excluding Mount Douglas, precedes the effects of the last glaciation (which set the soil conditions for the landscape in which we would like to disconnect downspouts). The permeability of

soils was laid down a very long time ago. I find information like this fascinating. If you would like more on this or have something to offer in this line, just chime in.

And finally—some will say “and its about time”—we were involved in a Shorekeepers survey on the beach, where the creek runs into the ocean. Partnered with the Restoration of Natural Systems Program from the University of Victoria, we rented a classroom at the university for a daylong preparation by Tom Rutherford from Fisheries and Oceans Canada. Then, on July 22, Tom, myself, Susan Low, Louise Ditmars, Moralea Milne, Linda Prior, Joy Williamson and Laurie and Mike Vaninsberge were out early on the beach to take advantage of the zero tide.



We hustled all day long to map and measure a 50 meter X 140 meter strip of beach, describe the differing habitats by physical conditions, and then sample those habitats for flora and fauna living on and in them. It was a rigorous exercise: all of us were exhausted when we finished up.

The data we collected goes into a data bank maintained by Fisheries and Oceans Canada. On the grand scale it lets the fisheries scientists look at what is happening on a variety of beaches on the B.C. coast. On the smaller scale, we can return to the same spot year after year to measure changes in conditions.

We found that the spot we had chosen to survey was species poor. However, other habitats on the beach, documented and photographed by Laurie and Mike Vaninsberge over the last few years, were species rich and biodiverse.



immature leaf

Ivy Demonstration Project



mature leaf

For those of you who have been following this proposal, the time for talk and conjecture is over and the time for action has arrived.

We have appointed two people, Andrea Schiller and Graham Watt-Gremm, to carry out the work this fall. They come to us via UVic's Restoration of Natural Systems program, and we plan to run the project in collaboration with the people from the university and from Saanich Parks Department. The C.R.D. Parks department is planning to do an internet and literature search on the subject of ivy control prior to making recommendations for the eradication of ivy from their parks. We will be working with them to make sure we minimize any overlap and maximize the benefit to both groups.

As an aside, the selection of two people from the ten who applied was very difficult because of the high calibre of all the candidates; it illustrates once again the abundance of talent and commitment we have in the Capital Region.

The first step has been to select the sites, and these have been found about 200 metres up from the gate along Churchill Drive. On the right, as you go up the mountain, is the control site with little infestation: the site to be cleared is on the left-hand, uphill section.

There will be marker tapes in place soon, as well as signs telling the public what is going on. Part of the project is to help the general public combat ivy in their own backyards. The two people conducting the project, Andrea and Graham, are available to answer questions whenever they are at the site. At the end of the project they will produce a first draft of a information flyer for the public. The more varied the questions they have answered over the next few months the more useful the flyer will be. So, ask away.

One of the novel aspects of this project is the selective use of RoundUp to control re-infestation. When this topic was first mentioned there was considerable concern amongst the members of the executive, we agreed to consult the membership, and we did so in a previous newsletter. To date, no one has contacted us saying they oppose its use, but it is important that everyone understands the limited conditions under which it will be used.

Firstly, all applications of RoundUp will be made by trained personnel from Saanich Parks; the project team will only prepare the ground for the professionals to do their job. Secondly, there will be no spraying; when we first proposed this method of control in the park, the idea was that the cut stems would be painted with RoundUp. In the interim, an even more selective way of applying the agent has been developed, using a syringe technique that avoids any damage to the surrounding area.

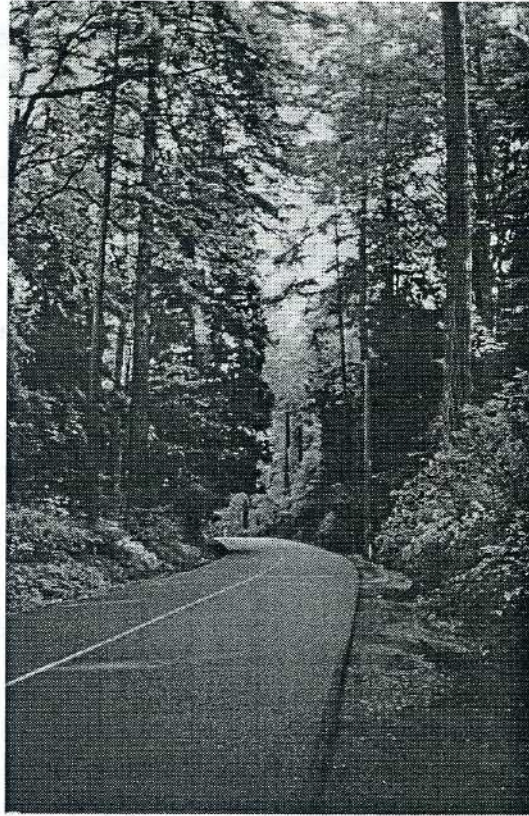
Long-term aspects of this project will be to see how quickly an area is re-infested and to assess the relative merits of mechanical pulling and chemical treatment. If you have any thoughts and concerns on the matter, please let us know—this is a sensitive issue and we are proceeding with a great deal of caution.

Stability Of Cordova Bay Road Cliffs Through The Park

Ever since the major scare in 1991 when great chunks of the cliffs slipped down to the beach, there has been concern about safety for the travelling public along this stretch of road.

The repairs that were made after those slides seem to have been successful, the road has not subsided and the banks have a new green face to them..

However, this was never designed to be a permanent solution and now another area of the cliff is giving indications that it might slide in a major storm. The engineers, who have been monitoring the area, have found a site about half way down the cliff face just north of the gravel pit that was like a mud puddle even in August.



When we walked the beach recently with a consulting engineer and a biologist from Thurber Consulting, a number of features were immediately apparent:

- Every point of failure along the cliffs involves the migration of trees, plants and sediment from the upper reaches to the beach.
 - The incoming tide washes away the slurry from the beach and provides a supply of sand to the area.
-

- Riprap has no effect on this final step and the slurry passes over the top of the riprap to the beach with little difficulty.
- To try to stabilize the road in the same way as in 1992 could do massive damage to the tree canopy and the view point on Cordova Bay Road.

The action proposed by the engineers includes:

- draining the cliff by drilling long hollow cavities at an angle into the cliff, and inserting drains to intercept the water and lead it safely to the beach.
- placing 700 metres of riprap along the beach at a cost of 1.4 million dollars
- possibly adding a road support system at a cost of 1.5 million dollars.

From what we have seen, if the drainage of the cliff is unsuccessful, then the cost of placing the riprap on the beach will be a waste of money.

Drainage of the cliff is essential if any long term stability is to be achieved, but the technology has not been tried in areas like this one.

And then there is Fisheries and Oceans Canada—what will they allow to happen below the high water mark?.

As well, we believe it essential to be sure it is feasible to drain a cliff to such an extent that it retains sufficient strength to support the road.

But make no mistake—this is the opening salvo in a debate that will determine the quality of the Park for our lifetimes For those of you who were thinking that these battles had been won, well, here we go again.

Storm Water and Disconnecting Downspouts

You'll remember from the June newsletter that Hugh McKay, Director of Engineering Services for Saanich, planned to bring a proposal to Council for a pilot project in disconnecting downspouts in an area of Gordon Head.

The idea of the project was to assist volunteer householders to use rain water from their roofs on their gardens, rather than run it into the storm drain and from there, in inappropriate quality and quantity, into Douglas Creek, where we are trying to raise salmon.

That proposal was approved by Council and work on the project began at the end of June, with volunteers from the Friends of Mount Douglas Park delivering door hangers to each house in the selected area. These door hangers described the project and how potential volunteers could find out more about it and/or become part of it. Members of the Friends and members of the Stormwater Committee were available to answer questions.

Members of E-teams were provided by the Veins of Life Society and trained by Saanich Engineering Department to assess volunteer sites, disconnect acceptable downspouts and install individual dispersal systems. They then visit each of the volunteer households and assess the site. If the disconnection can be done, the E-team disconnects the downspouts and installs the dispersal system. This work will continue throughout the early fall. A month or so after a household has disconnected, someone from our society will make contact, to ensure that the system is working well.

To date, about 50 households have signed up to have their downspouts disconnected. Since more volunteer households are desirable, we are planning to expand the area in which disconnections will be carried out.

At this early point in the project (designed to continue until late fall and hopefully carry on next year) the measure of success will be that there are no failures of disconnection.

With sufficient participation, water in Douglas Creek will be cleaner and the flows will be better balanced. This isn't going to happen tomorrow, but we're on our way.

Downspout Disconnection Display

September 14, 15 and 16

Gordon Head Recreation Centre
4100 Lambrick Way

The display will include a functioning stormwater model (to be displayed outside on the sidewalk of the Rec Centre to avoid potential water splashing), a sample of a downspout disconnection, a sample rainbarrel, and information about disconnection and the availability and costs of rainbarrels and additional technology.

Almost any property can become more environmentally sound and efficient. Come and see what you could do with yours.

Was This a Well-considered Decision?

The provincial government has recently abandoned the Fisheries Renewal project, thus cutting off advice and funding to many essential and successful salmon restoration projects throughout British Columbia.

We hope that lengthier and more careful consideration will reverse the decision before many of the gains that have been made in fish restoration are swept away. It is always more costly to begin all over again.

