

Watershed connections

Welcome

to the fifth issue of *Watershed Connections*, a volunteer publication for the Tod Creek watershed, distributed in February, June and October each year.

The purpose of *Watershed Connections* is to connect the community and provide information that will assist watershed residents to live and work in an ecologically sustainable manner, in harmony with the watershed environment.

Watershed Connections is produced by members of the "Friends of Tod Creek Watershed" stewardship group, with articles contributed by watershed residents.

A PDF version is available for people living outside the watershed.

The focus of this issue of *Watershed Connections* is on trees in the Tod Creek watershed. Local residents have once again produced a variety of interesting articles, this time describing the benefits and idiosyncrasies of urban forests.

One hot afternoon this past summer, I swam into the middle of Durrance Lake and reflected on the surrounding forest. Thanks to the foresight of those who created the urban containment boundary in the early 1960s, Tod Creek watershed has been able to avoid urban sprawl and provide many benefits for residents of the capital region as well as local residents.

I feel fortunate to live in the Tod Creek watershed. Although I value the social, ecological, economic and aesthetic benefits of trees everywhere, I particularly identify with the trees around our home. They are like old friends, especially the huge Douglas-fir hugging the house. Nevertheless, this fir does have its pros and cons. We appreciate its beauty and the shade it affords on hot summer days, but are less enamored by the fir needles that periodically cover the deck and clog the gutters. In the early days of living here I was terrified when the tree swayed and groaned in winter gales. Then we noticed woodpeckers attacking the bark and thought the tree was dying and would pose a danger. We consulted



Photo: Ivan Hunter

an arborist who told us the tree was healthy and was probably about 300 years old. This made me consider the insignificant length of time I will live here compared with that of the tree. Do I have the right to fell a tree that struggled through summer droughts and winter storms long before the first settlers arrived? It was probably a sapling when Peter The Great was building St. Petersburg. The tree is safe from me! — SHELAGH LEVEY, EDITOR

We invite comments and submissions from members of the community. Please contact us at 479-1956 or email wconnections@shaw.ca.

Unless we are able to raise more funding, this will be the last *Watershed Connections*. We would like to publish a final issue exploring past and present land uses in the Tod Creek watershed but need donations to cover the cost of printing. If you are able to help, please phone 479-5647 or email wconnections@shaw.ca.

Many thanks to the Municipality of Saanich for supporting this issue of *Watershed Connections*. Thank you to everyone who has contributed to this and past issues: funders, writers, photographers, Natalie Borden for her beautiful illustrations and especially Frances Hunter, a professional graphic designer who volunteered her time and expertise.— SHELAGH LEVEY

Our Watershed Woodlands

Seeing the Forest for the Trees



As part of a continuous vegetative buffer that extends from Tod Inlet to the Sooke River basin, our watershed's forests provide an enormous benefit to the Capital Region.



Photos: Woody Thomson

Saanich is about to revise its Tree Protection Bylaw, so this might be a good time to take a look at the issue of tree cutting within our watershed. Trees are able to evoke a surprising amount of passion and debate within local communities. There are many interests and perspectives involved. What are the issues that we need to be aware of with respect to tree cutting in our area?

The issues surrounding the planning, management and regulation of trees within any community are surprisingly complex. The reason for this is that trees do not exist in a social or ecological vacuum. Most of us are familiar with disputes that arise over the proposed removal of a prized local tree, such as a large Garry oak. The values at stake in these cases are largely concerned with the heritage or amenity benefits of the tree to the community. Less well understood — and of more relevance to our particular community — are the ecological values that larger aggregations of trees (i.e. forests and woodlands) provide to our rural communities and to the region as a whole.

Examples of these ecological values include the following:

- storm water management (capture, retention and slow release of precipitation)
- biodiversity conservation
- air and water pollution abatement
- nutrient cycling and soil development
- energy conservation
- carbon storage

From a planning perspective, it is important to realize that the provision of these natural services in an urban area the size of the Capital Regional District amounts to several billions of dollars! It is largely these values that are at stake when land clearing occurs within our watershed. (American Forests, which is one

of the oldest and largest non-profit conservation organizations in the USA, has undertaken a number of very rigorous assessments that measure the loss in value to a region associated with the loss of tree cover over a 25-year period. Economic values are estimated by calculating what it costs a community to replace the lost infrastructure services once provided by treed lands that have been cleared for agriculture or urban development.)

The discipline of planning for the management of trees at the broader community or landscape level is called Urban Forestry. Just as the concept of the “watershed” can deepen our understanding and appreciation of where we live, so the concept of the “urban forest” can expand and enrich the way in which we think about our local trees.

One of the first things to note from this perspective is that the urban forest exists along a continuum which stretches from the rural periphery into the downtown core. This observation helps us to locate our own local trees and woodlands within a broader regional forest. As part of a continuous vegetative buffer that extends from Tod Inlet to the Sooke River basin, our watershed's forests provide an enormous benefit to the Capital region.

Another thing to note is that the ecological productivity of the urban forest diminishes as one moves toward the city and its suburbs. This is because the ecological health of a forest is a function of its size, its spatial coherence and its biological complexity. All of these attributes diminish as one moves toward the urban core, where the landscape becomes ever more fragmented and culturally modified.

Consider, for instance, a large old maple tree growing along a wooded stream bank. Such a tree contributes heavily to the stream's environment, providing cool shade, a canopy-shelter and nutrients for the fish that dwell

From a watershed perspective, it is probably more useful to talk about protecting larger aggregations of trees and about managing them for a broad range of ecological values.

below or downstream. The tree also provides a habitat for a plethora of soil organisms, plants and wildlife. Even in its death, the tree contributes much needed coarse organic debris to the stream channel and forest floor. This little community of the tree, its associated plants and soils is also able to intercept and store vast quantities of storm water — far more than its poor urban counterpart, which has to struggle along in a narrow verge of grass, surrounded by hot pavement and concrete.

When we look at the health of the tree resource in our own watershed, we need to keep this notion of ecosystem size, coherence and complexity in mind. Here are a few questions to ponder in this respect:

- How diverse are our woodlands?
- Do we have healthy amounts of old-growth? Riparian woodland? Garry oak meadow?
- How botanically diverse is the understory of the dense second-growth that dominates so much of our woodland?
- How resistant are our woodlands to the dominant threats of urban forests, such as fire, disease, invasive plant and animal species and land conversion?

So, what can we take from this discussion that will help us with the debate over tree cutting?

- Firstly, from a watershed perspective, it is probably more useful to talk about protecting larger aggregations of trees and about managing them for a broad range of ecological values.
- In addition to a regulatory framework for conserving trees, we need a set of Best Management Practices to help local homeowners responsibly manage their woodlands.
- We need to keep fighting to have

ecosystem-based planning incorporated into all strategic land-use planning.

- We need to enlarge our planning horizon. We need to plan at a range of scales, including the watershed, the Capital region, the Georgia Basin and the Coastal Douglas-fir biogeoclimatic zone (basically, south-eastern Vancouver Island).

In summary, we need to become more sophisticated about how we manage the trees in our watersheds. Municipal tree-cutting bylaws, by themselves, are not sufficient. We need a regional Urban Forest Stewardship strategy. For further information please see http://www.hat.bc.ca/projects/UFS_final.pdf.

— JEREMY GYE

JEREMY GYE is a practicing urban forester and small woodlot manager. He and his family are local residents and members of The Friends of Tod Creek Watershed.



Photo: Woody Thomson

Beauty isn't everything!

The Pacific yew tree (*Taxus brevifolia*) with its gnarled, knotty, and crooked limbs is certainly no beauty but has great value. Its hard, elastic wood is prized by archers, and provided the fighting bows for ancient armies. In the 1960s it was discovered that the yew contained taxol, a cure for some forms of cancer.

The Pacific yew grows in shade and therefore only reaches a height of 5-9 metres and a life span around 400 years. This is in contrast to many of the huge yews in Europe that are estimated at more than 2,000 years of age. — SHELAGH LEVEY

natural history

Woodpeckers of the Tod Creek Watershed



Downy Woodpecker



Pileated Woodpecker

BECKY SHAW is a Prospect Lake resident who, for the past 32 years, has watched birds and bird behaviour on and around the lake.

NATALIE BORDEN is an illustrator living on Goward Road.

Rata- tata- tat! It's late winter in the Tod Creek watershed and nature's percussion section is tuning up. The Downy Woodpecker, Hairy Woodpecker, Red-breasted Sapsucker, Northern Flicker and Pileated Woodpecker are the five most common woodpeckers found in our area.

The Downy is a delicate, swallow-sized, black-and-white, streaked and spotted bird (the male has a red cap). It eats wood-boring insects, other insects, beetles, seeds and fruit. The Downy's preferred nest-hole site is in decaying or dead wood.

The Hairy Woodpecker, almost robin-sized, looks very much like a Downy on steroids. Although similar to the Downy in both looks and menu choices, the Hairy prefers live wood such as alder when excavating nest holes.

The starling-sized Red-breasted Sapsucker drills holes in trees particularly the Broad-leaved Maple, drinks the sap and eats insects, including those attracted to the sap drills. This bird excavates nest holes in trees with decaying heartwood.

The Northern Flicker with its spotted belly, black necklace and flashy orange under-wings has a wing span of about 33 cm. The male has a red moustache. These birds enjoy fruit, suet and seeds but almost half of their diet consists of ants. Although flickers excavate their nest holes in trees with punky heart-



Hairy Woodpecker



Red-breasted Sapsucker

wood, these birds will accept nest boxes. The Pileated Woodpecker is the "Woody Woodpecker" of our area. These stunning red-crested, crow-sized, black-and-white birds prefer a diet of carpenter ants. The Pileated Woodpecker jackhammers a nest cavity in a dead tree. The cavities are often used by other wildlife in subsequent years.

— BECKY SHAW



Northern Flicker

Illustrations: Natalie Borden

Did you know?

- Loud regular Rata-tata signal drumming (territorial, mate advertising or mate communication) done on down spouts, eaves, flashings, etc. does no damage.
- Sap from sapsucker drills are an important early spring food source for humming-birds.
- Woodpeckers are attracted to suet hangers especially during cold weather. In spring and summer I've seen harried parents swing by for a quick snack.
- Woodpeckers depend on dead or decaying wood. If this rotting wood poses no hazard on your property, please consider leaving any dead trees or cutting them to snag size (3 m or so). You might be rewarded with a resident woodpecker.

Significant Trees

Do you have a significant or heritage tree on your property that you would like to protect and register? If so, the significant tree committee would like to hear from you. Please phone Kathy Watson at Saanich Municipal Hall, 475-5494.

An advisory committee of nine citizen representatives makes recommendations to Council on the designation of significant trees to be included in the Tree Preservation Bylaw. Criteria include importance to the community from a point of view of their heritage, landmark, age, size or wildlife habitat. There is some funding available for trees requiring maintenance like restoration or pruning. For further information please see <http://www.gov.saanich.bc.ca/government/clerks/bylaws/treepreserve7632.pdf>.

Although our watershed does not have giants like those found in wetter areas of



Photo: Woody Thomson

British Columbia, we do have several listed trees as well as others like the three huge trees on Kerryview Road. — SHELAGH LEVEY

Some members of the Friends of Tod Creek Watershed and a 600-year-old fir at Maltby Lake.

Wildlife Trees

What is a wildlife tree?

A wildlife tree provides food, shelter and nesting opportunities for wildlife. Wildlife trees may be living or dead, standing or fallen. Most trees take many years to die and many more to eventually decay, during which time they can be invaluable for wildlife. It is estimated that wildlife trees are used by over 90 different animals in British Columbia. Sixteen percent of the province's birds, mammals and amphibians are dependent upon them.

Until recently, we have tended to cut down such trees, but now people realize their value and sometimes protect them by posting wildlife signs.

Characteristics of a good wildlife tree?

Special characteristics are needed to provide habitat for wildlife. Insect infestations provide food for woodpeckers and other birds like nuthatches. Woodpeckers excavate cavities for nest building and these primary cavities are used in subsequent years by many other birds and mammals. Tree limbs provide perches for birds of prey, and support nests for open nesting birds. Bats and some bird species use loose bark for nesting and roosting.— SHELAGH LEVEY



Putting up a wildlife sign.

How we can help

- Leave wildlife trees standing until they pose a safety threat. It takes many years for a tree to die and many more to eventually decay and fall.
- Leave trees with broken tops, hollow trunks, and feeding or nesting cavities. Fallen trees are just as valuable.
- If you have a tree worthy of a wildlife sign you can request one from Tod Manning at 478-7822 or etmanning@manningcooper.com.

Creating a Park

Involvement of the Local Community in the Tod Inlet Provincial Park

Many local folks, and indeed Victoria residents, walked along the creek to the old cement works passing the now silent community of Tod Creek.

One of the pleasant discoveries I made when I moved into the watershed in the late 1980s was the little health food store and restaurant at the corner of West Saanich and Durrance roads. I learned quickly that this was not only a place to enjoy healthy food, but a centre of environmental discussion mediated by Gwen and Derrick Mallard, the driving forces of the Citizens Association to Save the Environment (CASE). A main focus of this organization in the late 1980s and early 1990s was a development proposal that would see the historical Tod Inlet area turned into a luxury hotel, a golf course, marina and housing.

The community was concerned not only because of the development issues, but also because of the loss of the area's important historical heritage and the ecological values of the hilltop overlooking Saanich Peninsula, now Oak Haven Park and the lush forest along Tod Creek. Many local folks, and

indeed Victoria residents, walked along the creek to the old cement works passing the now silent community of Tod Creek. Not so long ago the community reverberated with the sounds of immigrant workers from China and India. I recall one evening at Derrick and Gwen's looking at a moving photograph of a funeral pyre taken in the 1930s or 1940s.

Gwen, Derrick and many other folks organized a two-streamed march of concern in the fall of 1990 to highlight the importance of the Tod Creek area to the local and regional community. Our goal was to demonstrate the strong regional public interest in the potential loss of important values that a mega development would bring. One stream of citizens flowed from Gwen's health food establishment on West Saanich Road and the other from Brentwood Bay, meeting at the present-day entrance into the provincial park on Wallace Drive. First Nations drums, the skirl of bagpipes, and braying of donkeys punctuated the tread of more than 500 people to the concrete remnants of the historic community on Tod Inlet. The speeches at the site echoed off the dark forest walls across the water as kingfishers chattered by. Word pictures of once-forested slopes covered in condos, golf greens full of foreign businessmen on weekend junkets, and the still water of the inlet choked with luxury yachts emphasized a starkly different future than today's tranquil scene.

Support for the idea of protecting this regionally, and indeed nationally, important site began to grow from this point on. Gwen and Derrick worked tirelessly to gather important supporting information on the environmental and especially historical values of the lower part of Tod Creek watershed. One important step, taken in 1991, was a bio-physical study to document the natural values



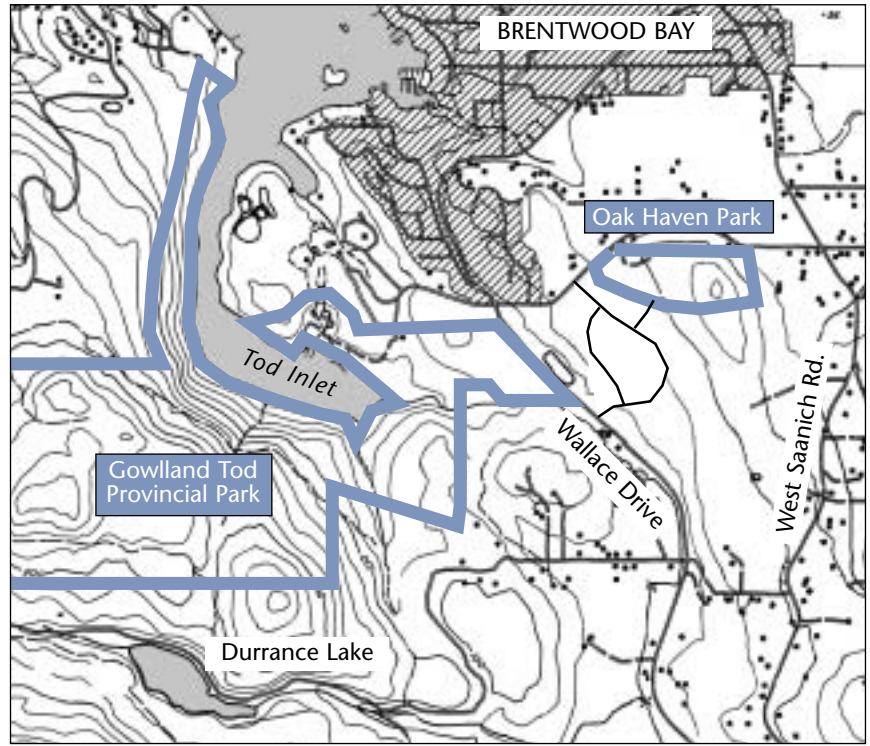
Gwen and Derrick Mallard in January, 1999.
Photo: Ivan Bulic

From their home and vegetarian restaurant on West Saanich Road, Gwen and Derrick Mallard worked tirelessly to bring attention and action to many environmental issues. Some of the topics they researched and publicized included the dangers of the herbicide 2,4-D, oil tanker traffic along the B.C. coast, atmospheric pollution and global warming, water pollution, mine waste discharges, and bovine growth hormones. They promoted the need for energy-efficiency, water conservation, and the need to reduce consumption and waste.

In recognition of more than a quarter century of dedication to environmental issues, Gwen and Derrick received several awards including the prestigious Lifetime Achievement Award awarded by the Government of Canada. — SHELAGH LEVEY

of the lands. At the request of Capital Regional District Parks, several of us employees of the provincial government and others prepared a report that clearly summarized and outlined the remarkable natural value of the lands, among many things noting the stream and its overhanging verdant forest and the rocky knolls with Garry oak habitat of concern. Personally I got a chance to describe and map the geology and learn a great deal, surprised to discover that there were once efforts to look for minerals in the bedrock in what is now Oak Haven Park in Central Saanich.

As the scientific and heritage case strengthened for a park, CASE continued to inform and lobby the community and our political representatives. One of the participants in that walk in 1990, Andrew Petter, became Minister Petter with the election of a new provincial government. He had heard Gwen and Derrick's case for preserving Tod Creek and with other MLAs, cabinet ministers and municipal officials saw an opportunity for an incredible environmental legacy. Resolving issues related to Tod Inlet and Gowlland Range lands, the provincial government purchased much of the private property in these areas and gave us the Commonwealth Nature Legacy. On March 30, 1994, I stood with Derrick and Gwen under the fresh green leaves of towering big-leaf maples in Goldstream Park as the announcement was



made. The community's dream had been realized. Our children and visitors from around the world would be able to experience one of the most spectacular natural areas adjacent to an urban centre anywhere on the globe.

For me and CASE, stage one of the process was over. Tod Creek Lands were in public hands. Then came the BC Parks Master Planning process, but that is another story! — RICHARD HEBDA

RICHARD HEBDA is a long time resident in the watershed. He is Curator of Botany and Earth History at the Royal British Columbia Museum and is an Adjunct Associate Professor at the University of Victoria.

Covenant Protects Oak Haven Park

East of Wallace Drive is a 10-hectare park within the Garden Gate Estates subdivision. In 1995, when Fama Holdings Ltd. wanted to subdivide what was known as Benvenuto Hill, they offered 10 hectares on the rocky hilltop as parkland. Central Saanich Council arranged a conservation covenant with the Nature Conservancy of Canada to ensure that the sensitive Garry oak ecosystem is protected in perpetuity.

Habitat Acquisition Trust recently completed a landowner contact program. Homeowners were provided with materials and ideas to help them act as good stewards around the protected park area.

The hilltop affords a panoramic view from the Gowlland Range to the San Juan Islands. Please tread with care to avoid disturbing plants and wildlife. It is a precious but small example of a Garry oak habitat and would not be able to withstand dogs or heavy use.

— SHELAGH LEVEY



Photo: Bruce Whittington

Unlocking the Secrets of the Old Growth Douglas-fir Forest

Ecological attributes of old growth Douglas-fir forests until several decades ago were completely unknown to most British Columbians. Fortunately this has changed, and we in British Columbia are deeply indebted to a team of researchers from a broad range of disciplines — soil biologists, botanists, entomologists, wildlife ecologists and others in the Andrews Experimental Forest in western Oregon who over the last 25 years studied every functional element in this forest.

One example is mycorrhizae, a symbiotic organism that combines (as the name suggests) a fungus with a tree root. These fungi, which live deep in the soil, cannot photosynthesize and produce their own food. The tree roots, without the fungi, cannot sponge water and nutrients from the soil. But by living together they both benefit. Indeed on many drier and nutrient poor soils, trees would simply not be there without the mycorrhizae.

Another was the discovery that in the treetops of an old growth Douglas-fir forest

there is a high ratio of predatory spiders and insects to defoliating herbivorous insects. In contrast, in the treetops of young Douglas-fir, there is a low ratio. In other words, nature has its own system of biological control, and if we want to reduce the risk of an outbreak of defoliating insects, we need some old growth nearby, especially because many predatory insects and spiders cannot fly very far.

And third, there are the arboreal lichens such as Lobaria that live in the old growth forest canopy and are active nitrogen fixers which add significant quantities of nitrogen to the forest soil. All gardeners know that nitrogen is something needed for growing healthy plants.

These are only some examples of what were secrets in old growth forests and there are likely others waiting to be discovered. So in addition to protecting old growth for its many special habitat and aesthetic values, knowledge of how old growth Douglas-fir forests work has broad utility for improving the quality of forest management wherever it occurs. — RAY TRAVERS

RAY TRAVERS, a registered Professional Forester, has served with industry and governments in BC and the Northwest Territories. Currently he works as a consultant specializing in forest policy analysis, resource planning, community forestry and environmental impact assessment. Although Ray lives in Gordon Head, he has many connections with Tod Creek watershed. In addition to being a member of the Unitarian Church on West Saanich Road, his uncle was a former owner of the Prospect Lake store in the 1940s and his father's cousin Ed Travers once lived on Meadowbrook Road.



Photo: Ivan Hunter

13 benefits from trees



What Trees Mean to Me

The tree is my life symbol. This did not happen in one fell swoop but rather gradually as I realized what things really mattered to me. What matters to me? Experiencing life as an adventure, as growing, living reality; enjoying time with friends; being a responsible planetary citizen; appreciating my family both immediate and extended; recognizing the cyclical nature of life and being amazed at miracles and mysteries; laughing a lot; trying to be flexible enough to survive the traumas that life throws at me.

What does this have to do with trees? Trees have roots that hold them fast to the earth and spread out to ensure nourishment, stability and balance; trees have trunks that carry those necessary things to the branches and leaves; the branches in each tree are unique, forming different shapes and patterns not only from one kind to another but within each kind; the leaves are open to the sky and the sun — providers of more sustenance from sun and rain. Leaves also bring needed shade to all species. But all this explanation still doesn't quite do it...

The tree reaches down (into the past) and out (into the future); it is available to all other life forms; it wears its lifemarks proudly on its bark; it shares all of itself freely with others; it is flexible as long as possible and when it is time to transform back into the earth it does so without eagerness but also without regret.

A tree reminds me to stop and just be; a tree demonstrates the beauty of each season; a tree both reaches out and stands still; it is always present; it is always growing or being transformed into another form that will be beneficial to all; when the wind is its playmate it shows how much it loves to dance; its arms are always open to all. It is a wonderful role model!

This is a small part of what trees mean to me. — JANE BRAMADAT

JANE BRAMADAT is the minister to the First Unitarian Church of Victoria located at 5575 West Saanich Rd. She was born and grew up on the Canadian prairies and has lived in Manitoba, Ontario, Alberta, the West Indies, Alaska, and is now honoured to call Brentwood Bay home. Everywhere she has gone she has made friends with trees and appreciated the differing and valuable contributions they have made to this world.

1. Trees increase real estate values of both commercial and residential property.
2. Trees create a pleasing environment in which people are inclined to shop more often, for longer periods of time, and to spend in the range of 11% more for the same product than if it was sold in a treeless business district.
3. Trees can reduce ambient noise levels by about half.
4. Trees and other plants reduce violence on school grounds and affect students sense of safety and well being.
5. Trees, when properly sited to block cold winter winds and the hot summer sun, can reduce energy bills by as much as 40%.
6. Trees clean the air by removing dust and other particles, and absorbing pollutants such as ozone, carbon monoxide and sulfur dioxide.
7. Trees absorb carbon dioxide and release oxygen. The oxygen that one person needs to breathe for a year is produced, on average, by two healthy, mature trees annually.
8. Trees reduce glare and reflection off road surfaces, as well as shading and cooling those surfaces and thereby reducing the "heat island" effect.
9. Trees provide wildlife habitat.
10. Trees reduce erosion and the danger of flooding by holding soil with their roots and slowing the force and pace at which rain strikes the earth.
11. Trees have an important role in salmon recovery, both when they are planted near streams and away from them. They shade and clean water, as well as slow the force with which it enters streams.
12. Trees can screen unwanted views and create privacy.
13. Trees are also good for people's psyches. Hospital patients recover faster when they have a view of trees. Big, strong, old trees have a reassuring sense of endurance. Studies have shown that brief encounters with nature can improve people's capacity to concentrate. Another study found that people who saw nature regularly during their workday reported higher job and life satisfaction and less illness than those who didn't.

In short, trees just make life more pleasant.

SOURCES: Wild Bird Trust of Canada: Greening Of School Grounds, Harrowsmith Country Life, Oct. 2003, and http://www.ci.vancouver.wa.us/parks-recreation/parks_trails/urban_forestry/benefits.htm.

Demystifying Saanich bylaws

Managing Trees in the Saanich Rural Environment

The District of Saanich's "Urban Containment Boundary" (UCB) has created a unique situation when addressing tree or forest protection using the Tree Preservation Bylaw.

Background

The Tree Preservation Bylaw was adopted through Saanich Council in 1993 a short while after the then, Municipal Act passed Bill 77 empowering Municipalities to protect trees on private property.

All of the core municipalities (City of Victoria, Oak Bay, Esquimalt and Saanich) have "Tree Bylaws" for their unique circumstances. Saanich has by far the most comprehensive and active bylaw perhaps in Canada because of so much indigenous urban and suburban forest on private property. It was designed purposely to protect urban trees where most of the development takes place.

This bylaw, conversely, left rural Saanich relatively alone. At the time of its creation, statements were made by rural residents that they had been showing good stewardship of their large rural parcels. They felt they had a right to the use of their land for various agricultural purposes and needed to harvest some of their forest in a sustainable way without being burdened with more regulations.

Therefore the regulation to prohibit "clear-cutting" but allow the cutting of 3 trees per acre per calendar year was expanded from the Prospect Lake watershed to include all of rural Saanich (outside the UCB). An exception to the clear-cut clause is when an owner of ALR property wishes to clear more than their annual allowable cut for bona fide agricultural purposes. The owner may apply for a Tree Preservation Bylaw permit, and swear out an affidavit with our legal office that the purpose was indeed agricultural. The cost of the permit is \$25.00 for the first three trees and then \$5.00 for each additional tree to be cut.


What's agricultural, you ask? Agricultural purposes, too numerous to mention here, are listed in the definitions of the bylaw, which is available on our Saanich website. Please see the direct link <http://www.gov.saanich.bc.ca/government/clerks/bylaws/treepreserve7632.pdf>.

Currently, the situation of Rural Saanich and the Tree Preservation Bylaw is very much the same as was enacted in 1993 with a few additions. For example, there has always been a ban on cutting trees in scheduled watercourses and flood plains but the recently created Development Permit Area #24 also known as the Tod Creek Development Permit area doubles the distance trees and other vegetation are protected from the stream, lake or riparian area from 15 metres to 30 metres further recognizing the important role trees play in keeping such an environment healthy and functioning properly.

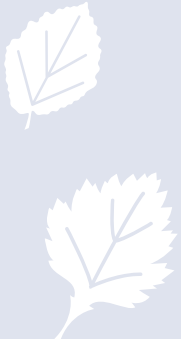
Future

We still recognize that the vast majority of rural landowners are excellent stewards of their property and manage it and the trees in a very sustainable way. However, there has also been concern expressed that the allowable cut is systematically whittling away the once abundant indigenous forest, and regulations or lack of are allowing the removal of large blocks of trees in one area of a large parcel. How to address this is still being debated, but we are looking at reviewing our ability through permits and education to ensure only the necessary trees are removed when changes to the land occur.

There is more to Saanich's rural forest than just the trees. The diversity of flora and fauna found there is very precious. Please manage with care. — RON CARTER



RON CARTER
is the Tree
Preservation
Officer for
Saanich Parks.
He manages the
Tree Preservation
Bylaw as well as
volunteer programs
fostering natural
area restoration on
publicly owned
land.



meet your neighbours

Alan Bonnell

Anyone who travels the local roads will have noticed Alan Bonnell. Whenever the retired veterinarian takes a walk he carries a plastic bag and picks up garbage along his route. Many complain about litter, but Alan does something about it. He appreciates this beautiful area and is saddened to see it needlessly littered, especially by junk food containers thrown from vehicles. He hates what he calls "the junk food mentality" and says, "We are fortunate to live in such an attractive place and it is a shame to spoil it.."

Alan's father worked in England during the Second World War. Alan was born in England and lived there until 1947 when his father decided to bring his family to Canada. They settled in Saanich and shortly after arrival Alan met Monica Whitehead. They were married a year later. In 1967, Alan and Monica bought a two hectare farm on Wray Avenue. Their daughters wanted to keep horses but the property was too steep, so when the two level properties next door came on the market they quickly bought them. This area has since been sold and the Bonnells recently built a retirement home surrounded by trees on top of the ridge.



Photo: Shelagh Levey

Alan enjoys it when people wave and honk their horns as they drive by. He says that sometimes people stop and talk to him and "it is so nice to meet pleasant people." We are fortunate to have neighbours like Alan Bonnell. He demonstrates that although we cannot change the world we can make our own special contribution to the common good.— SHELAGH LEVEY

community report

ADRIANE POLLARD is
Manager of Environmental
Services in the Saanich
Planning Department.

Remediation of Faulty Septic Systems around Prospect Lake

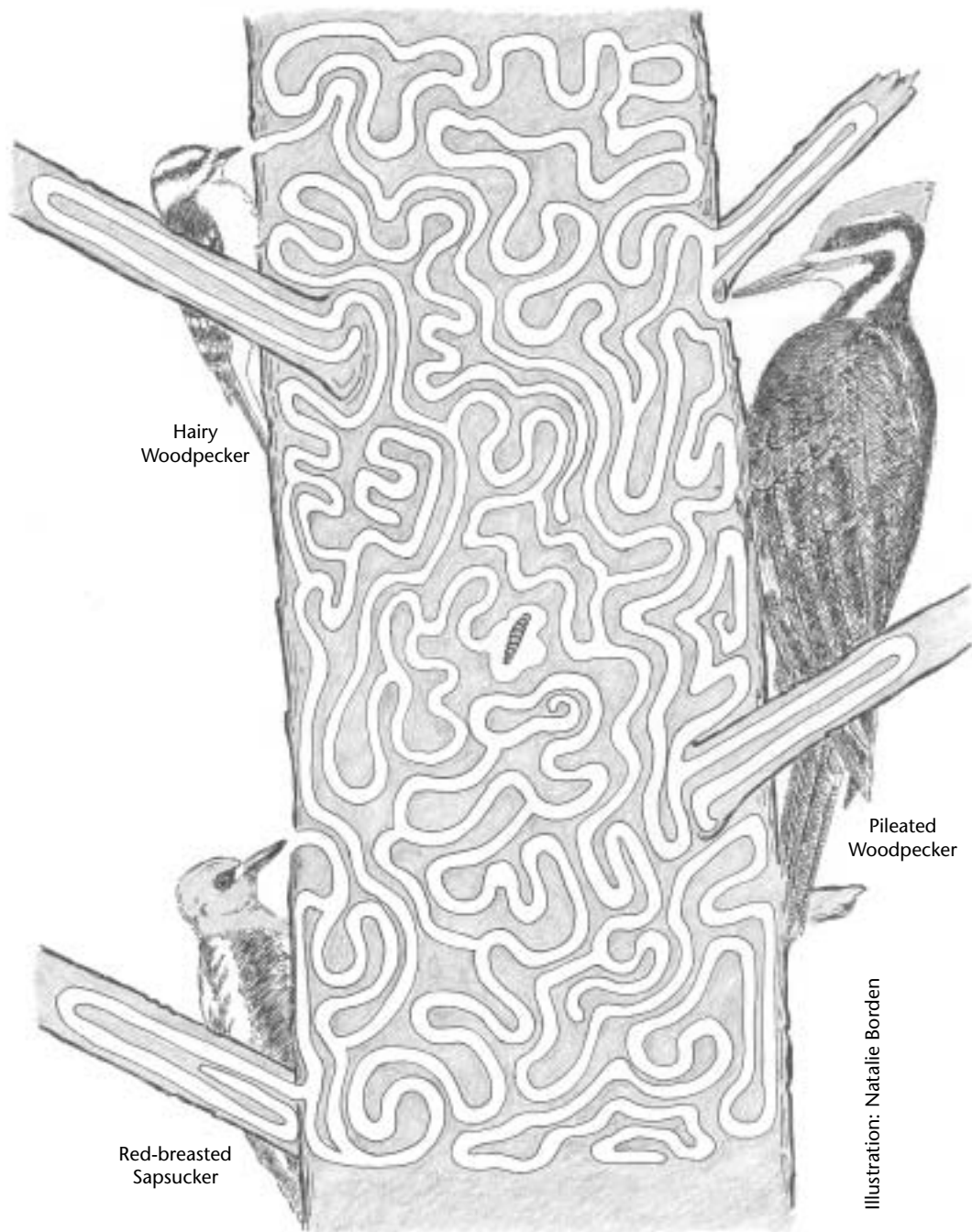
As a result of the consultant report of July 2002 (Prospect Lake Water Sampling) the Vancouver Island Health Authority was requested to sample septic systems in the areas where the highest nutrient levels were recorded. Twenty-five systems were assessed, and four of these were found to be problematic. One property had a drain field distribution problem, two had leaking septic tanks and one was cross-connected into a storm drain system that enters the lake! The owners were ordered to repair the systems and most of this work has already been completed.

It is interesting to note that the majority of residents were knowledgeable about their septic systems and pumped them out regularly. It just goes to show that a professional inspection can reveal problems we cannot see.

I don't know how much the water quality in the lake will benefit from these repairs, but it certainly will help. — ADRIANE POLLARD

Here is a Woodpecker Maze for you to have fun with. Can you find which woodpecker gets to his or her dinner? Draw a line from the woodpecker to the beetle larvae.

Dear Watershed Kids,
Do you like to watch birds? If so, you may have seen and heard many woodpeckers around here.
Woodpeckers hunt for insects. They use their powerful beaks to dig holes in wood.
Woodpeckers catch insects with very long tongues. Because their tongues are so long, woodpeckers tuck them inside their heads and around their skulls when they are resting.
Your watershed friend,
Shelagh



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Opinions expressed in *Watershed Connections* should not be construed as being the consensus of the Friends of Tod Creek Watershed. Each article is the responsibility of the author.

An Invitation to Join the Friends of Tod Creek Watershed

The Friends of Tod Creek Watershed are a group of people who live in the area and come together for companionship and to engage in activities that benefit the watershed. Their mission statement is to protect and enhance the integrity and biodiversity of the watershed. Action groups are currently working on: well water safety, mapping, trail building, water quality monitoring, riparian planting and restoration. Everyone is welcome to join the group. Meetings are held on the first Wednesday of each month, September to June at Prospect Lake Community Hall, 5358 Sparton Road at 7:30 pm. For information, please phone 479-8801 or 479-5647.