

Cottle Creek and You

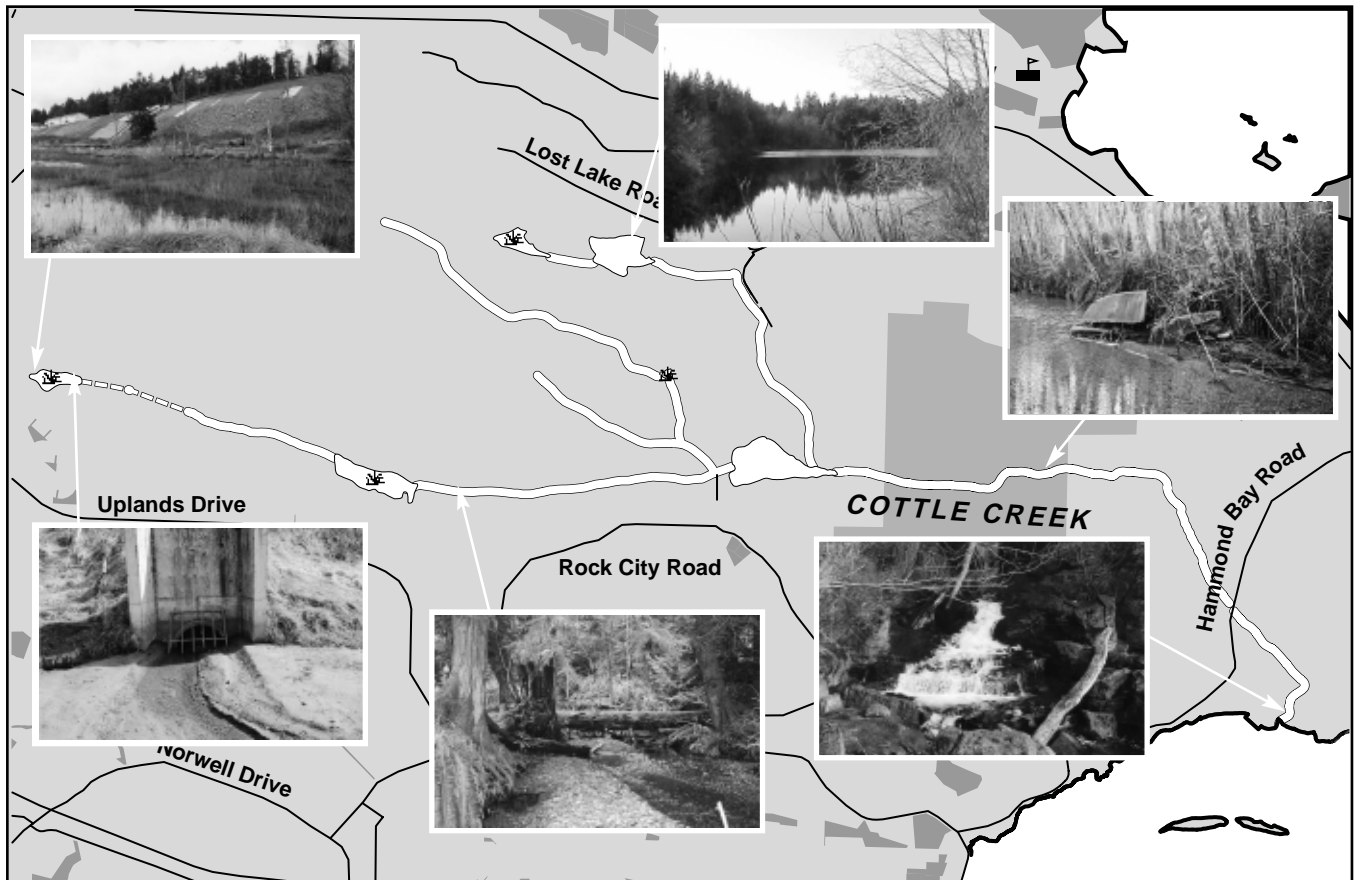


Photo credits: Project 2000

Where is Cottle Creek?

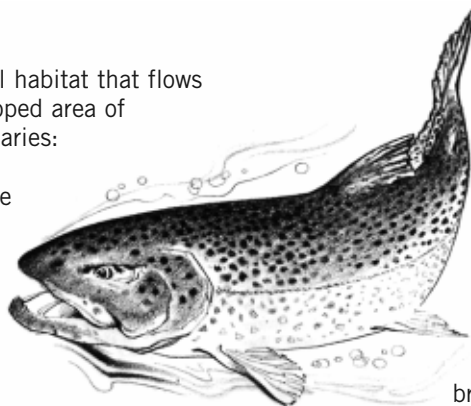
Cottle Creek is a little known gem of natural habitat that flows through the Linley Valley, a largely undeveloped area of north Nanaimo. It encompasses three tributaries:

upper Cottle Creek from the headwaters off Rutherford Road to Cottle Lake; North Cottle Creek from Lost Lake to Cottle Lake; and lower Cottle Creek from Cottle Lake to Departure Bay. The total Cottle Creek watershed (the area drained by this system) covers about 4.5 km² or 1113 acres.

The Cottle Creek system represents the last large undeveloped green zone in north Nanaimo. While other watercourses have been piped and put underground, Cottle Creek flows in a mostly natural condition except for a half-kilometre section under Brookwood Drive.

Fish and Wildlife

Unlike other watercourses in Nanaimo, Cottle Creek does not support any sea-going salmon species, primarily because the dramatic drop where it discharges into Departure Bay prevents salmon from migrating up the Creek. However, the Cottle system supports a natural stock of cut-throat trout, likely



because of the excellent mix of habitats – a deep lake, pools and gravel beds – and lack of competition from other species.

The area along the Creek also supports some magnificent stands of mature forest, and a variety of wildlife such as amphibians, reptiles, raccoons, beaver, mink, deer, and many species of birds. Because of these habitat values, City bylaws protect a 15-meter wide “leave strip” on both sides of the Creek (see the brochure “Watercourse Protection and You”).

What’s Happening

Urban development is placing pressure on Cottle Creek. At Brookwood Drive, clearing of steep slopes for residential development has caused severe siltation into the system. Two natural wetlands near the headwaters have acted inadvertently as “sediment ponds”, saving the rest of the creek from being silted up, but at a grave cost to the viability of these wetlands. Other impacts include a culvert under Landalt Road (which creates a barrier to fish movement), and bank erosion and pollution from cattle grazing.

How Can We Help?



PREVENT EROSION: Land clearing and construction without proper erosion control measures have been the number one impact on Cottle Creek to date. Livestock and human recreation too close to the creek also cause bank erosion and collapse. Soil is washed into the stream and smothers the creek bottom, damaging habitat for fish and other water life.

ACTIONS: When doing any type of building activity, take measures to keep soil from being washed into stormdrains or down-slope. Keep human and animal activity away from erodible stream banks.

MAINTAIN STREAMSIDE VEGETATION: Trees and shrubs shade the water, keeping it cool for fish in the summer, providing cover and sheltering fish from predators. Leaves and insects fall into the stream, providing food for fish and other wildlife. When vegetation is removed, temperatures and water levels fluctuate widely, banks erode and habitat for fish and wildlife is lost.



ACTIONS: Protect streamside trees and vegetation already growing on your property. Restore streamside areas by planting native vegetation.



REDUCE HARD SURFACES: Water quantity and quality are affected when pavement, houses and other hard surfaces replace natural vegetation. Surface water no longer filters slowly through the soil and vegetation, but instead, runs off these surfaces very quickly into storm drains, ditches and streams.

ACTIONS: Use gravel, loose bricks or flagstones instead of impermeable surfaces like pavement and concrete whenever possible. Let rainwater from roofs drain into the soil or into rain barrels for use in gardens.



PREVENT GARBAGE ACCUMULATION: Plastic containers, tires, newspapers, batteries, metal scraps and old car parts and other human wastes can reduce water quality, damage habitat and make the stream unattractive and undervalued.

ACTIONS: Remove human garbage from the streams and rivers but leave natural woody debris in place.



MODIFY OR REMOVE UNNATURAL BARRIERS: Structures such as culverts, retaining walls, dams and poorly designed bridges can block fish movement or disturb stream.

ACTIONS: Learn about environmentally friendly designs for building structures along or across the creek, and be sure to obtain required permits and approvals. Approach municipal or regional governments about changing structures on public lands, which threaten water flow, fish access or bank stability.



KEEP RUNOFF CLEAN: Storm water runoff into streams frequently carries gas or oil, commercial household or garden chemicals, and other materials toxic to fish and aquatic life.

ACTIONS: Keep substances like paint thinner, oil, detergents and sediment out of roadside drains. Reduce the use of pesticides, herbicides and fertilizers on lawns and gardens.

Here is a Vision for Cottle Creek...

It is 2020 and neighbours living in the Cottle Creek watershed have worked to preserve and restore damaged sections of the creek. Fortunately, when interest was raised 20 years ago, a large part of the watershed was still relatively undeveloped. Consequently, even with continued community growth, the system is flourishing, and supports a great natural stock of cutthroat trout as well as a rich variety of wildlife and birds.

Restoration and education projects have helped the creek to prosper. Residents along the Creek have stabilized stream banks on their properties by planting native vegetation, and the culvert at Landalt Drive has been replaced to allow



fish access to rearing habitat upstream. New development has preserved the leave strip and other environmentally significant sites as the community has grown. With Streamkeepers training, local high school students are studying the invertebrate life and monitoring the health of the Creek. Valuing urban streams has become a way of life for the next generation.

The alternative to this vision is neglect, pollution, deforestation, loss of species, and another concrete landscape where our children are denied the opportunity to appreciate the magic and beauty of nature at their back door. Act now and treasure Cottle Creek.

The Future is Ours to Create: Become a Voluntary Steward

Voluntary Stewardship means that residents make a conscious, voluntary choice to conserve and enhance the natural features and values of their property. Stewardship may focus on a distinct landscape feature, a rare plant, or a special habitat like a watercourse. For more information on voluntary stewardship, contact **PROJECT 2000** (see below).

If you have an idea to share or would like more information, contact one of the following:



City of Nanaimo
Environmental Planner
455 Wallace Street, Nanaimo, B.C. V9R 5J6
Phone 755-4483
<http://www.city.nanaimo.bc.ca>



PROJECT 2000/Nanaimo Area Land Trust
#102 – 55 Victoria Road
Nanaimo, B.C. V9R 5N9
Phone/fax: 714-1990
email: proj2000@nanaimo.ark.com

April 1999