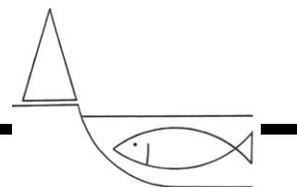


# MILLENNIUM CREEK PROJECT



## INSIDE THIS ISSUE:

<i>Spawning project results!</i>	2
<i>Brown Trout spotted!</i>	2
<i>Beavers still active!</i>	2
<i>A look back at results!</i>	3



Back Swimmers are common in most streams!

### Special points of interest:

- The results of the spawning habitat enhancement project this year are better than expected!
- Brown trout may spawn in Millennium Creek in the future!
- Recovery of the stream is becoming more apparent!



*This is the temporary project sign placed along the creek this summer.*

## “NEW SPAWNING CHANNEL CONSTRUCTED ON MILLENNIUM CREEK!”

It took a bit of hard work and a lot of enthusiasm, but the end result was well worth it!

Since the restoration program on Millennium Creek was completed in 2008, brook trout have been spawning in the creek. As part of the reclamation work, spawning areas were created at key locations on the creek.

Unfortunately, silt that is caused by a large wintering population of ducks at the primary spring pond, has had a negative impact on the survival of trout eggs at these spawning habitats.

To remedy this problem, it was determined that a new isolated spawning habitat should be created. The best location for such a habitat would be right where the spring water flows out of the bank, on the primary spring pond.

Once a design plan had been approved and all of the necessary permits were in place, BVHD proceeded with the construction of a new



Above: This is a photo of the new spawning channel constructed this

spawning habitat at the chosen site. Funding for the project was provided by Inter Pipeline Fund.

The project was completed in mid-September of 2010. The result was a new channel with a concentrated volume of flow, from a number of smaller feeder springs, lo-

cated near the primary channel.

This higher volume of flow created a perfect habitat for spawning brook trout. Willow branches were placed to provide overhead cover, until some planted willows would help achieve the same cover effect, over time.

## “COCHRANE SCOUT TROOP DIGS IN FOR WILLOW PLANTING!”

Members of the Cochrane Scout Troop spent two evenings this spring, planting willows on Millennium Creek.

The planning project was part of the ongoing enhancement program, which is targeted at riparian recovery along the stream banks.

The Scout Troop has been involved in other similar projects on Millennium Creek, over recent years.

Their last project was a clean-up along the creek in 2009. The event was finished off with a hot lunch.



Above: Cochrane Scout Troop members put willow plants into the bank.

## “SPAWNING ENHANCEMENT PROJECT A MAJOR SUCCESS!”

It is always gratifying to see positive results so soon after an enhancement project is completed! Such was the case with this year’s spawning channel project.

Only a few weeks after the new spawning channel on the Millennium Creek pond inflow was constructed, brook trout were observed, spawning in the new habitat.

On October 6th, the first brook trout redds or egg nests were spotted in the new channel. Over the next month and three weeks, the site was monitored for an accurate assessment of the utilization of the spawning habitat in the channel.

The brook trout were observed, spawning in the new

channel and in areas around the inflow. I suspect that seepage from the new channel was creating up-welling in the gravel around the inflow and trout were using these areas to lay down their eggs.

During the spawning season on the creek, I visited the channel every few days to keep accurate records of how many trout were spawning.

The trout spawned in the area from the first week of October, until the third week of November. This is quite late in the season for brook trout to spawn!

In total, I counted 31 brook trout redds in the new channel and 6 redds in the inflow area. The total count was 37!



Above: This is a mature brook trout, spawning in the new habitat.

## “BROWN TROUT SPOTTED IN NEW SPAWNING AREA!”

It was a huge surprise when brown trout were spotted in the inflow area this fall. In late October, I observed two brown trout darting about at the inflow area of the new spawning channel.

I was hoping to see this pair of trout spawn, but I can only speculate that one of the redds on the inflow area of the pond was made by the pair, in the following days.

This sign of brown trout in spawning mode can only hold promise of things to come! I will be watching in future years for more of them to be caught in the act. If so, I hope to get a picture!!



This photo of a brown trout was taken near the inflow area on Millennium Creek Pond.

*“In the future, brown trout may also spawn in Millennium Creek!”*

## “BEAVERS STILL ACTIVELY BUILDING DAMS ON MILLENNIUM CREEK!”

With the increased volume of flow, from the restoration project, beavers are now anxious to move in and build their dams!

This is not the first year that beaver dams were built on the creek and it certainly will not be the last. An ongoing management program, conducted by the Town of Cochran, Parks and Facilities Department, will hopefully keep things under control!

It is especially important, now that Millennium Creek is classified as a major spawning tributary to the Bighill Creek. Trout need to have easy access to their spawning habitats at the headwaters area and beaver dams will block their migrations in the fall.

So far, the management program is working well and in the future, it will require due diligence!



Bow Valley Habitat  
Development

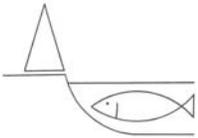
# 5 Glenport Road  
Cochrane, AB T4C 1G8

This newsletter was published by:  
Guy Woods

Phone: 403-932-4467  
Fax: 403-932-4467  
Email: [guywoods@telusplanet.net](mailto:guywoods@telusplanet.net)

## Google Millennium Creek Project

Illustrations by Guy Woods



### Primary Sponsors:

TransAlta Utilities Corporation

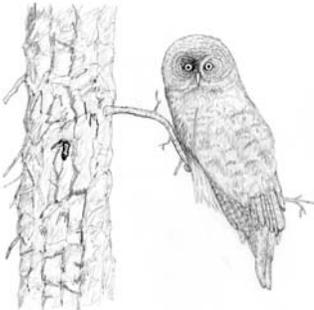
The Town of Cochrane  
Parks and Facilities  
Department

The Alberta Conservation  
Association.

Inter Pipeline Fund.

The Cochrane Community  
Grant Program.

The Cochrane Community &  
District Grant Program.



*You can view some video coverage of the entire Millennium Creek Project on You-Tube! Just go to the You-Tube home page and in the search the site box, type "Millennium Creek Project" or "Millennium Creek Spawning". There are two three part videos of each of these productions. These videos are designed to inform the partners involved and the public about all phases of the program!!*

## "STREAM'S RECOVERY IS NOW QUITE EVIDENT!"

It has now been 6 years since the start of the reclamation work on Millennium Creek and 2 years since completion!

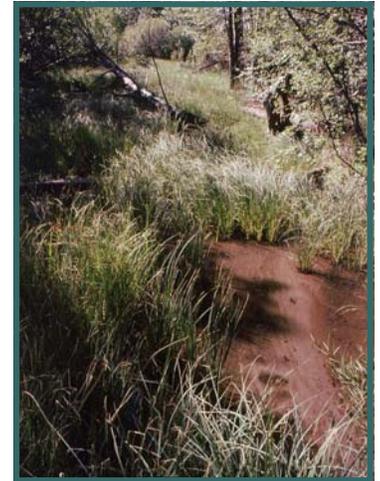
A stream channel that was once too wide and choked with sedge and rushes, is now narrow and defined, with adequate depth for trout to live in.

The creek will continue to heal over time and be further enhanced by mother nature's final "brush strokes".

### Right Photo:

This is a photo of the creek channel, directly below Griffin Road Culvert, taken in 2004.

You can see the channel is full of silt and choked with sedge throughout its



### Left Photo:

This is a photo of the same length of stream channel, taken in 2010.

You can see that the stream channel is more defined and it looks more like a natural creek channel.

The gravel was added to the channel in the



It is a real pleasure to continue to watch this natural process take shape! For the few that helped out in the project and the many that observed the enhancement program, they too will also witness the transition!

The fact that the new creek

channel supports a healthy trout population is "matter of fact!" now. Something that you cannot see that easily, but you know it is there.

I look forward to what the future has in store for the creek! Maybe more surprises are yet to come!!

