

# Stream Tender Magazine

February 2016 Issue



## "Millennium Creek Brook Trout Hatch Comes Early This Year"

In 2010, Inter Pipeline and Bow Valley Habitat Development constructed a spawning channel on the primary ground spring that feeds Millennium Creek.

Because the spawning channel was built right at the source of the spring, ground water temperatures during the winter months were warmer than the channel further down the stream.

This warmer water incubated the brook trout eggs faster, with an earlier hatch resulting. The source water where the trout laid down their eggs in the gravel beds is also clean throughout the winter, insuring a higher percentage of survival in egg numbers.

This winter, with warmer ground water and an early fall spawn in 2015, meant that the eggs hatched in December, with emergence from the gravel in late January. Trout larva will stay in the gravel for about a month after they hatch, living off of their egg sacks.

On my first visit to the spawning channel on February 8th of this year, I was surprised to see how large the brook trout fry were. This is the earliest egg hatch that I have documented on the spawning channel over the past 6 years.

Another thing that I noted was the high number of trout fry holding in the cover provided below the spawning channel. There were plenty of small trout concentrated in areas where there had only been a few on previous years.

The trout fry were all in good form, with fat little bodies and obviously well fed. I believe that all of the woody debris that we added to provide cover for the young trout was also enhancing the invertebrate populations.

After witnessing this early hatch of high numbers of trout, I can safely say that this year will be a great recruitment year for the stream.

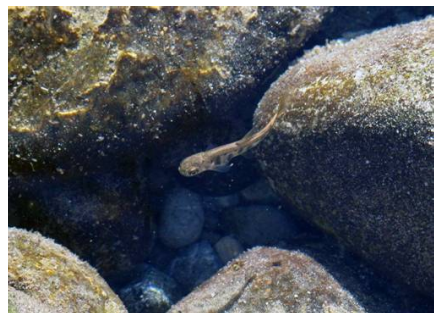


## How Many Brook Trout Fry Can You Spot in this Photo ?



**Above:** There are five brook trout fry in this photo. The area is a little over one square foot in size and the small trout utilize the rocks and woody debris for cover. Some days I will have to stay motionless for some time before the small trout come out of cover into view.

You can see the video on my You Tube Channel with this link:  
<https://www.youtube.com/watch?v=in33rydnn8I>



## "Woody Debris is an Important Component of Fish Habitat"

Without woody debris in a stream, there would be limited fish habitat. For streams that are void of boulders or rock outcroppings, woody debris is the primary component of fish habitat.

The growth of willows and trees above the water's surface will provide good overhead cover. This overhead cover creates shade for stream trout. This is important for a healthy trout stream.

As part of the natural process, dead branches, tree trunks and washed out root systems from willows and trees eventually enter the water. It is when this happens the wood becomes debris and it will serve an important role in providing invertebrate and fish habitat.

It is a well known fact that woody debris in a stream with adequate gradient can enhance

spawning habitat. The woody debris is a natural collection site for spawning gravel. Provided the woody debris is large enough to create the right flow dynamics in the stream channel.

Just this last fall, I observed brook trout spawning below a tree trunk that had jammed across the stream channel and collected gravel on the downstream side. Brook trout were actively spawning in that clean gravel.

Once the trout eggs hatch and the small juvenile trout migrate out of the spawning gravel, they will find areas with woody debris to seek shelter in.

This woody debris also has a good invertebrate population which tends to like the organic structure of the dead wood. The smaller invertebrates are preyed upon by

the juvenile trout, providing an important food source for the young fish. This food source will continue to sustain the trout fry during the first weeks and months of their lives.

Another form of woody debris that enters a stream are the limbs or branches of willows and trees along the water's edge. During winter snow falls, the weight of the snow on willow and tree branches will bend the branches down into the water or onto the ice.

By the spring, these limbs and branches will end up either just over the surface of the water or down under the surface. This type of woody debris is very important habitat for trout.

Eventually, these submerged limbs or branches will die off, but continue to be attached to the living willow or tree.

## Where Do the Trout Go After Millennium Creek ?

With all of these brook trout hatching on Millennium Creek, you must wonder where they eventually go. The trout will not live their entire lives on the small creek, but they will get their start there.

Millennium Creek is a spawning and nursery stream. Trout fry their eggs there and when the eggs hatch, the juvenile trout have a safe environment to spend the first year or two of their lives. Pressure from competition will force some of the trout down and out of the spring creek, early in their lives.

Millennium Creek enters the Bighill Creek and this is where the fish will eventually end up living. From where they enter Bighill Creek, there are plenty of kilometers of the larger stream for the brook trout to reside in. This migration into Bighill Creek will start in the second year of their

lives. However, some trout will stay in Millennium Creek until they are larger.

Also, there are a few brook trout that migrate downstream of Bighill Creek and enter the Bow River. The Bow River is not the best type of habitat for brook trout. Due primarily to the fluctuating water levels during the summer and fall months.

I have caught some nice brook trout in the Bow River in Cochrane over the years, and I often wondered if they had started their lives in Millennium Creek. However, catching brook trout in the Bow River is not a common occurrence.

There are growing numbers of brook trout in the Bighill Creek in recent years. I have hooked into some nice ones while fly fishing the small stream. It is great fun.

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The Bow Valley Riparian Recovery and Enhancement Program will be expanded to include the Jumpingpound Creek this season.

A small stream bank erosion site was chosen for a planting this spring. The planting will be rather small in scale, when compared to what will happen on the other streams in the program, but it will be a good start.

It has been a few years since Bow Valley Habitat Development has completed projects on the Jumpingpound Creek, but it will be great to get bank on the JP once again. Permissions are already in place for the small project and the plan is to complete the planting just after the spring runoff is over.

The site is on a ranch just upstream of the Town of Cochrane. An eroding stream bank is threatening to undermine a livestock coral that is located close to the stream bank.

The planing will be sponsored by Bow Valley Habitat Development. Because the project was not part of the 2016 proposal, BVHD will cover the costs this first year.

If all works out as planned, we look forward to further stream bank riparian zone plantings on the Jumpingpound Creek in the future. I will keep you posted on this project.

## Is There a Brown Trout Hatch on West Nose Creek ?



After this last fall's brown trout spawning event on West Nose Creek, I am anxious to see if the eggs incubated successfully over the winter months.

Unlike some of the other small spring creeks that I monitor for a trout hatch, the larger West Nose Creek will be a difficult challenge for finding any newly hatched brown trout fry.

With the spawning time similar to Bighill Creek, as well as the water temperature regime, I expect that the egg hatch will occur in late winter, with the trout emerging from the gravel sometime in late April and into May.

Without applying for a research permit, I am hoping to capture the presence of brown trout fry by taking some video or photos. This will be a difficult task, but I will give it a try.

I will concentrate my efforts just downstream of the key spawning location, below Country Hills Boulevard. I have already gain permission for access from the golf course, at that location on the creek.

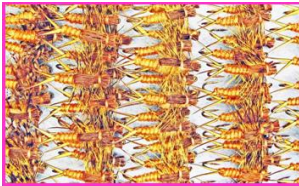
I will be focusing on the small lateral margin habitats, below Country Hills Boulevard. I have already gain permission for access from the golf course, at that location on the creek. I will be focusing on the small lateral margin habitats, below Country Hills Boulevard. I have already gain permission for access from the golf course, at that location on the creek.

## Below Photo:

This photo of a large brown trout holding over a freshly dug redd or egg nest, was taken during the 2015 fall spawning event on West Nose Creek. I will be looking just downstream of this site for any sign of a trout hatch.







# Stream Tender Magazine

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## "Kids Fishing Clinics Draw Large Crowds"

Mitford Trout Ponds are located on the site of an old gravel pit that was transformed into a park setting, complete with the two small ponds.

In the late 1990's, Town of Cochrane Parks staff decided to further enhance the park's recreation opportunities by stocking the ponds with rainbow trout.

Over time, the ponds became a perfect environment for parents to take their children on their first fishing adventure.

In the early years of this fishery, a number of year end fishing derby's were

held at the ponds and then the need for a "Kids Fishing Clinic" event was first organized.

Each year that the clinic was held the crowds of young anglers, accompanied by their parents, grew in size. The last year of the event, there were 76 registrants that came to the ponds to catch a trout.

You could always tell when a trout was hooked, by the excited yelps of both young anglers and the parents that were often as exuberant as the kids were.

After the Kids Clinic was over, many of the young anglers would return to

the ponds over the summer months to further enhance their fishing experience.

In 2015, brown trout were also introduced into the trout ponds, so now there were two trout species that a fisher's can try for. Also, in 2015, a really nice set of signs were placed at the site of both trout ponds, to guide anglers on what the regulations for the ponds fishery were.

The "Kids Can Catch" fishing event that is planned for 2016, should be great fun for a new generation of young anglers and everyone else involved in this great event.

## "Trout on a Stick"



Above: Not every trout gets safely released back into the water, but that is ok, every kid should have the option of tasting fresh caught rainbow trout. Especially when they caught them and the fish are a nice pan size. Just the right size for these fishing buddies.

## Regulation Change Proposal Update

In December of 2015, a proposal for a regulation change to protect spawning trout was submitted to ASRD Fish & Wildlife. Recommendations that three primary spawning tributaries to the Bigbill Creek be closed year round to angling.

The proposal included a letter of support from the Town of Cochrane. The regulation change, if successful, would protect three small spring creeks from any fishing activity in the fall spawning period.

In the first week of February, I received word from the regional biologist that the proposal was received too late in the year to be considered for 2016. This does not mean that a regulation change is not beyond possibility, but it does put the whole process on hold for now.

It is my hope that the proposal will not be lost or forgotten, for future consideration. After all, it is a simple but effective way of protecting the reproduction of our local trout fishery.



Above: This is one of two new signs that were placed at the ponds in 2015. The description of the trout shown on the signs will be a big help for young anglers that don't know what a trout looks like.



## "Bigbill Creek – A Trout Stream Recovery Story in the Works"

There is a small, but growing number of fly fisher's that have learned how to fool the Bigbill Creek trout into taking their fly patterns. This number is growing from year to year.

Some of the original local fly fishing group that participated in the 2008 and 2009 angling survey were the first to be introduced to the stream's fishery. A few of these individuals are still fishing the Bigbill every year, as far as I am aware.

Since that first group started to learn how to catch the Big Creek trout on fly rods, a few new anglers have join in on the annual trout hunt.



A 2015 Bigbill Creek Brown Trout

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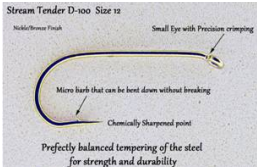
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## "Improving the Local Fishery"

Some fly fisher's burn a lot of carbon traveling to their favourite trout streams. Wouldn't it be nice if there were more great fishing destinations closer to home?

In recent years I have discovered a few new local fishing destinations, which just happen to be project streams of mine. The first was Nose Creek and the second was West Nose Creek.

Nose Creek has been supporting a population of pike for a number of years, but it wasn't until around 2012 that I first discovered this. So far, I haven't caught anything really big, but the smaller pike have been great fun on a fly rod.

Just this last year, I further expanded my selection of fishing spots to include West Nose Creek. On a late season trip I managed to hook into 5 brown trout and I am hoping to find some brown trout eventually. This stream will definitely be on my list for next year.

The quality of fishing on both of these streams is somewhat below average, but I have great expectations for the future. All that both streams require at this point in time, is a little attention on improving water quality and habitat.

While other fly fishers will be burning considerable amounts of fuel, while traveling to their favourite trout streams this year, I will be further exploring a few local waters.

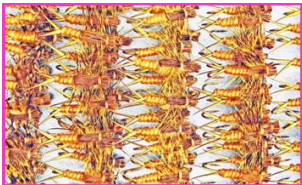
Our home waters are important habitats that have tremendous potential to provide great recreation. Local anglers have a vested interest in seeing these streams are taken care of. After all, we are the primary stake holders in their future health and well being.



A West Nose Creek Brown Trout



A Nose Creek Pike



# Canoe Tender Magazine

February 2016 Issue



## Bow Valley Riparian Recovery and Enhancement Program—Winter Inspection

A few trips were made to some of the planting sites on Bighill Creek and West Nose Creek this winter. My intention was to see how this past two seasons of planting on the stream banks was coming along.

During the winter months, when there is a blanket of snow and the shoreline grasses are covered, the tops of the willow and tree plants can be easily distinguished growing up from the cover of snow.

This is the best time of year to spot the new plants and get an idea of the survival rate. Other plants are encased in the elevated cover of ice on the streams, but you can still spot the odd tip of a new year's growth on the surface of the ice.

Some of the sites that I have a particular interest in are those bank stabilization sites, where the eroding stream banks are collapsing into the stream channel. Willows and trees have been planted along the

base or toe of these eroding banks to take root and create stability over time.

These sites are especially important when it comes to water quality. By stopping the erosion, many tonnes of silt will be prevented from entering the stream channel every year, with an immediate improvement in the water clarity downstream.

Last year, I completed a survey of the number of stream bank stability sites on Bighill Creek. The total came to 58 planting sites. This winter, I tallied the number of sites on West Nose Creek in the City of Calgary. The total of these city sites came to 64.

On the Bighill Creek this past spring and summer, I noticed an improvement in the clarity of the water on the lower reach of the stream, which means that less silt movement is occurring on the creek.

There also appears to be less accumulated silt on the streambed.



Willow Plants  
Just the tops are showing

## What Do The Planting Sites Look Like ?

At all of the planting sites on Nose, West Nose and Bighill Creek, photos and some video has been taken to show what the sites look like, prior to the planting of new native riparian willows and trees.

These images and videos will be used to demonstrate how these sites will transform into healthy bio-diverse ecosystems, over time.

Eventually, when the willows and trees are tall

enough to stand out in a landscape panorama, photos and video will be taken from the same location as the before program shots and footage.

It will take a number of years to complete this part of the program plan, but when this is completed, we will have some great evidence of how successful we have been in our objectives. I can hardly wait.

### Right Photos:

These two photos show lengths of West Nose Creek, in the City of Calgary.

As you can see, the stream channel is pretty much void of any willows and trees over long distances.



## "Heavy Beaver Browsing on Willows"

On West Nose Creek's upper reaches, there are very few willow plants along the stream channel. The few that are growing close to the water's edge are browsed upon heavily by the resident and migrating beaver populations.

What plants there are, appear to be immature willows, until you take a closer look at their bases. You then will notice that there are heavy trunks close to the ground and

only the new shoots and branches are achieving any growth and height.

With such a limited amount of food for beavers, any standing willows are kept well cropped and low to the ground.

It is hoped that, once the newly planted willows start to provide more forage for beavers, some of these older plants will start to have a chance at reaching an average height and become more visible in the landscape.



## Riparian Zone Bio-Filtration

West Nose Creek is a perfect example of a stream that suffers from over nutrient enrichment. Both upstream of the City of Calgary and in the city itself, large amounts of fertilizers are washed into the stream over charging the system with organic chemicals.

These fertilizers come from both agriculture and urban sources. Add to that the amount of field water from cattle operations upstream of Calgary and you have a major problem to deal with.

One of the huge benefits of a healthy riparian zone, with plenty of willows, trees and aquatic sedges, rushes and grasses, is that they help to filter the surface ground water, before it enters the stream.

Both the root systems of the plants and the microbial life that is found in the plant detritus absorb much of the organics, before this

nutrient enters the water. Dead leaves, branches and grasses create a rich microbial habitat both on and just below the surface of the ground, bordering the water's edge. As water filters thru this microbial life and the root systems of the plants, organics are filtered out.

Without a healthy riparian zone, most of the organics over charge the

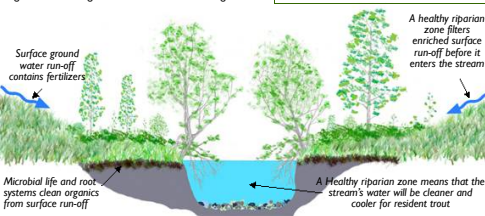
stream system and heavy aquatic weed growth is enhanced by the nutrients in the water.

Aquatic weeds will filter organics as well, but a healthy balance needs to be in place for fish to thrive. Especially trout.

This bio-filtration is one of the primary goals in the Bow Valley Riparian Recovery and Enhancement Program.



Above: Too much nutrient can result in algae blooms and weed choked streams.



## Canon Canada/Evergreen Planting Site on West Nose



Above: In February of this year, I visited the Canon Canada—Evergreen planting site on West Nose Creek, in the City of Calgary. The site was planted with native willows and trees in October of 2015. The plants are doing well, despite some being chewed off by rodents. The new branches are limber and show signs of life.

Some of the new limbs have been chewed off by rodents, but I expect that some of these will start to produce new growth in the spring of 2016.

### Right Photo:

Volunteers from Canon Canada, Evergreen and BVRHD planted 600 native willows and tree plants in October of 2015, along West Nose Creek.



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Other titles by Guy Woods that are also available at Amazon.ca are:

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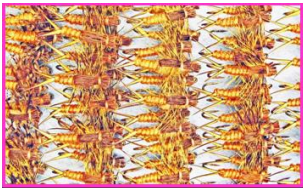


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## Brook Trout – A Beautiful Member of the Trout Family!

The brook trout was the first non-native trout to be transplanted in the province of Alberta, just after the railroad was built around the turn of the century, the brook trout was transported from the eastern provinces of Canada to its new home in the Rocky Mountains.

Brook trout are native to the Atlantic province's streams, lakes and rivers, where it was, at that time, considered the primary sport trout by many anglers.

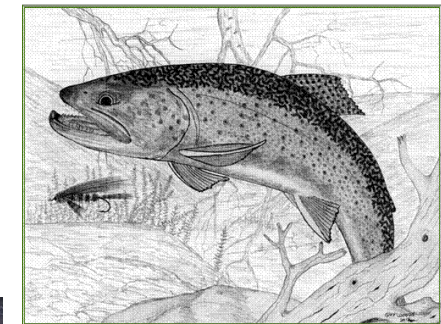
I suspect that when residents of eastern Canada moved out west, they longed for their native trout species. After all, the brook trout is the most beautiful member of all of the trout family.

When the brook trout first arrived in the Banff area, it was transported by milk jugs to many area streams and lakes, where it was released into new waters. Some of these new waters had been previously occupied by native cutthroat trout and bull trout.

In modern times, many fisheries managers hold great contempt for this member of the trout family, because it has displaced most of our native trout on many trout streams.

However, with the impacts of agriculture and development, many trout streams have degraded to the point that they would not support our native varieties of trout anyway.

For some of our local small streams, the brook trout and brown trout are the only trout that can inhabit these streams.



Below: Brook trout are spawning on Bighill Creek. They have managed to fan the spawning gravel beds clean, but whether any of the eggs will survive is left to speculation. At this site, there is plenty of silt on the streambed, just upstream!

I believe that it is important to look after this new member of our trout family, out west here, in its new home. They may be considered a non-resident, non-native or invasive trout species, but they are definitely here to stay. There would be no way to get rid of them anyway!

In my mind, the brook trout and brown trout are a perfect mix for streams that would not support other native varieties, under the present conditions of those waters.

Presently, there are many streams in our area where the cutthroat trout and bull trout are in recovery, due to improved fisheries management programs.

However, in the foothills areas, where stream conditions are different, there are good populations of both brown trout and brook trout.

There is potential for a well balanced approach in how we manage both native and non-native trout species, without going far on either side of the issue.

Right now, many of the streams to the north of Cochrane, Alberta, hold good numbers of reproducing brown trout and brook trout. These trout provide good angling opportunities and they also support a variety of other wildlife that depend on them for a food source.

With the main focus of fisheries managers in our area, concentrating on the bull trout and cutthroat trout recovery program, I hope that our non-resident varieties are not neglected.

In Cochrane, the focus of the Millennium Creek and Bighill Creek projects has been on maintaining and enhancing both brown trout and brook trout populations. Bow Valley Habitat Development will continue to do so.

I believe that there is plenty of potential in improving the fishery in this area, if we take care of these two fine sport fish!

## Coarse Fish are an Important Resident of our Trout Streams!

When the term "trout stream" is spoken, ones attention may focus solely on sport fish that live in that flowing water.

After all the sport fish are usually of primary interest to those who fish or those who know someone else who likes to fish.

However, trout are not the only residents in all of our streams and rivers. There is a wide variety of other members of the fish family that occupy these stream systems.

These other fish are often referred to as coarse fish, which is not a very respectful title for any member of the fish family.

Coarse fish are actually a very important part of most of a trout stream's food chain. Feeding both trout and insects.

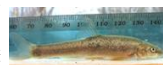
Fish such as minnows and small suckers provide an important food source for hungry feeding trout, especially medium to large sized trout that depend on a larger portion of protein in their diet.

When forage fish die in the stream channel, their bodies nourish certain types of aquatic invertebrates, thus enhancing other living things that reside in trout streams.

The eggs that minnows and suckers deposit in the rocky bottom of a stream will also be consumed by both trout and stream insects. If there are numerous coarse fish in a trout stream, the trout can grow much larger in size!



Above: This is a white sucker. Other common suckers in our area are mountain and longnose suckers.



Above: This is a longnose dace. Other common members of the dace family are the finescale and speckled.

Below and to the right: These are photos of some of the coarse fish that occupy many of our area trout streams.



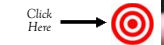
Above: This is a five spine stickleback minnow. The spines are located on the dorsal fin of this fish.



Above: This is a pout dace. It closely resembles the lake chub in appearance.



Above: This is a Lake chub. Although it is called a lake chub, it is a very common resident of our trout streams.



## "Large Trout Still Linger in Jumpingpound Creek!"

I am occasionally asked about the fly fishing in Jumpingpound Creek. My answer is usually "pretty good", without too much for details. However, I do point out that the stream is an important spawning tributary to the Bow River.

This fine little trout stream enters the Bow River in the Town of Cochrane, with one bridge crossing that provides a good view of the stream. For anyone that drives or walks over the bridge, they will first notice that it is a pretty little stream.

The result of this first encounter with the Jumpingpound Creek, usually arouses the curiosity of many new comers to the area. Especially if they are fly fishers.

With the new regulations restricting the harvest of rainbow trout, it is a catch and release fishery for this variety of the trout family. Protecting these rainbows in the creek will insure that we have a relatively good population in this reach of the Bow River.

Fortunately, after a lot of hard work by fisheries managers, landowners and other stakeholders over the years, the stream has received the protection that it so rightly deserves!

The fact that the JP is a protected stream, makes it a little easier to answer questions about the sport fishery in the creek.

No need to treat the topic like a well kept secret anymore, when compared to years earlier, when it was important not to advertise the potential of good fishing on the stream.

I may not fly fish on the Jumpingpound Creek as much as I use to, but when I do get out on the water of this beautiful freestone trout stream, I enjoy it immensely!

One of the most recent developments on the JP Creek that will benefit the overall trout fishery is the partnership between many of the landowners on the stream and the "Cows and Fish Program".

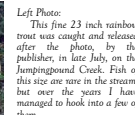
As a result of this partnership, large areas of the stream are being protected from the impacts of livestock. With this program in the works, the riparian zone has started its recovery.

In recent years I have noticed quite a difference in the amount of new growth along the stream!



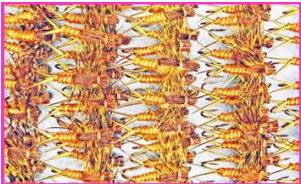
Above: An adult fly larva hatches a parasitic disease of the small population in abundance on lower body.

HOME



Left Photo: This fine 23 inch rainbow trout was caught and released after the photo, by the publisher, in late July, on the Jumpingpound Creek. Fish of this size are rare in the stream, but over the years I have managed to hook into a few of them.

They are full bodied trout that seem to find plenty of food in the JP to grow to this size, if they are protected by regulation!



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## "The Urban Fishery Program Initiative"

Bow Valley Habitat Development has been collecting important fisheries information and data on a number of local streams in recent years. The three key streams in this program are Bigbill Creek, in the Town of Cochrane, West Nose Creek in the City of Calgary and Nose Creek in the City of Airdrie.

- Location of key feeder springs on all three systems in the program.
- There have also been some measures taken to enhance the fisheries in the local streams in the program. Some examples of this are as follows:
  - Removal of old beaver dams to allow fish migration upstream.
  - Enhancement of fish habitat by riparian recovery and enhancement.
  - Taking measures to encourage the implementation of stream fisheries management policies to protect wild sport fish populations.

Over the last few years, I have noticed a keen interest by both City and Town department managers, to any new discoveries that have occurred in their areas of responsibility. Primarily parks settings along the streams previously mentioned.

- Some examples of what types of data have been collected are as follows:
  - Stream water temperature logging.
  - Documenting and mapping key spawning habitats and annual timing information on when spawning occurs.
  - Success of egg incubation and timing of hatch and emergence.
  - "The Location of fish populations and the species of sport fish in those areas.

## Urban Fishery Program 2015 Volunteer Contribution Summary

This past year was a great year for volunteer support for the "Urban Fishery Program". The most notable contribution in time was directed at Beaver Dam Notching, which involved the opening of old beaver dams to allow fish migration.

Besides the beaver dam notching work completed, there were a number of other activities that required a commitment of time to carry out. The following break down demonstrates this further contribution, including the beaver dam program:

- Dam notching—26 hours
- Spawning survey—26 hours
- Hatch monitoring—18 hours
- Publishing Stream Tender Magazine—77 hours
- Meetings/Tours/Inspection—18 hours

**Total VPH's—206 hours**  
I look forward to another very productive year in 2016. There are already some worthwhile plans for this season in the works.

## "Spawning on the Enhanced Habitat on Millennium Creek"

In the last year of the Millennium Creek Restoration Program, in 2008, spawning habitats were created on the chance that brook trout would utilize them for reproduction.

However, until this year of 2016, it was hard to provide evidence of whether or not the eggs from each year's spawning on the original habitats, were hatching.

Fortunately, this February, I managed to finally observe brook trout fry, just downstream of the spawning beds that were added into the stream channel.



Above: This photo shows a brook trout holding over the spawning beds that were created in the last year of the stream restoration program on Millennium Creek, in 2008.

## "Monitoring the Trout Hatch for 2016"

As I write this, confirmation of a successful trout egg hatch has already been established on Millennium Creek. Later on in the early spring, monitoring of both Ranch House Spring Creek and the Upper Park Spring Creek will reveal the results of hatch activity on those streams.

The stream that provides the greatest interest for me this new year is West Nose Creek. After discovering spawning activity by brown trout this past fall, I am very excited to see if I can confirm a successful incubation of those trout eggs.

Just this past week, I made a trip into the city to see whether some feeder springs had opened up the West Nose Creek stream channel, early in the winter. The influence of the warmer water provided by these feeder springs would provide a clue as to whether there would be an earlier hatch of the trout eggs.

Thermal temperature range has a direct influence on the incubation timing for fall spawning trout, such as brown trout and brook trout. If the water is warmer, the incubation

period will be shorter. To my surprise, the creek channel at the key spawning habitat next to Country Hills Boulevard was almost totally free of ice. There are two primary feeder springs just upstream of this site that had kept the surface of the water free of ice and warmer than other areas of the stream.

There could be some trout fry emerging from the spawning gravel as early as March or possibly as late as May. I will start to monitor the stream for any signs of trout fry, in mid to late March. This will continue until either I spot some juvenile trout or I don't.



Above: This is a photo of a newly hatched brook trout that was holding in one of the pool habitats that were constructed during the 4 year restoration program on Millennium Creek. This is the first time that I was able to capture a brook trout fry, that was hatched from a spawning bed only a few metres upstream of the pool habitat. This proves that some brook trout eggs do survive and hatch on the creek channel.

"There is an abundance of microscopic aquatic invertebrate life in Millennium Creek, to sustain a trout fry for the first part of its life. Especially midge larvae"



HOME

## "2014 West Nose Creek Willow and Tree Plants, in the City of Calgary"

On February 20th, I inspected the Hidden Creek Drive planting site on West Nose Creek, in the City of Calgary. To my surprise, the creek was open and almost free of ice.

A number of plants had been damaged by rodents stripping both limbs and bark off of a few of the plants, but they still appeared to be alive.



Along the water's edge, I could see the willows that were planted in 2014 growing out and over the surface of the stream, along the stream banks.

In a few more years, these plants from the first year of the Bow Valley Riparian Recovery and Enhancement Program will be very noticeable along the banks of the creek in Calgary.

## "A Trout Redd on West Nose Creek"



A trout redd on West Nose Creek in the fall of 2015

### Right Photos:

These photos show how the willow plants from the 2014 planting program are doing on West Nose Creek, in the City of Calgary.

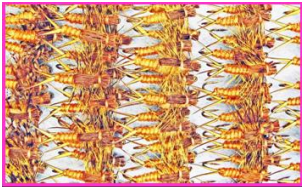


Reddents have been foraging on some of the willows and trees, but these plants may still survive to see maturity. This damage is just part of the natural process of planting native plants.

Above: This clean patch of gravel is a trout redd or egg nest on West Nose Creek. The photo was taken during the fall spawning period on West Nose this past fall.

The female trout fans a depression in the gravel and then lays her eggs, as the male trout fertilizes them. The eggs are then covered with gravel by the female and the water percolates through the gravel providing oxygen, as the eggs incubate.

Large movement of silt in a stream can smother the eggs, or greatly reduce the survival rate. This is yet to be determined on West Nose Creek.



Above: A early sun casts a long shadow over the stream channel of West Nose Creek, just before I safely released this giant brown trout back into the water.

### "A Long Way To Go Yet—On West Nose"

Although catching a large brown trout on West Nose Creek that day was an experience, it turned out to be the only trout that I caught in 5 hours of fishing.

It was the thought of catching another huge trout that kept my interest up that morning. So I ended up fishing a lot longer than I planned to. Don't get me wrong, it was still an enjoyable experience to fish the creek for a few more hours, but normally, I would not have gone so long without another bite on my fly pattern.

The sport fishery on West Nose Creek is still more of a potential goal than a reality at this point in time. However, getting a big reward for your efforts every now and then is very encouraging.

The real gains in the sport fishery on West Nose, will come if there is a successful reproduction of new generations of trout, by an annual spawning event and a successful egg incubation. At this point in time, only the spawning event has been documented.

Hopefully, in the next few months an even larger discovery will take place. If we can find that the eggs from this past fall's spawning are hatching, this would be a monumental discovery. Even if there is only a partial egg hatch, with a low survival rate, the news would still be significant.

I will continue to monitor the stream for a trout hatch. With a lot of luck, I will report more and more fly fishing events every now and then in the next issue of Stream Tender Magazine.



February 2016 Issue

### "October Brown Trout on West Nose Creek – Calgary"

Part of this year's plan for West Nose Creek in the City of Calgary was to explore how far up the creek the brown trout were residing. Little did I expect that I would get such a late start on this goal for 2016.

Last week, while I was inspecting some willow and tree planting sites on West Nose Creek, I was surprised to find open water in the stream channel. The creek looked very enticing, from a fly fisher's perspective.

On Oct. 26th, with a forecast of 15 degrees promising a great day for fly fishing the lower Bow River, I suddenly changed my plans and decided on starting my fly fishing season on West Nose Creek a little early.

The only draw back for fly fishing on this particular day was the forecast of wind gusts from 20 to 40 kilometres per hour. These conditions can make accurate casts difficult with a dry fly line, but using a sink line would alleviate part of this problem. Also, the use of a fly rod with a heavier line weight, such as a 6 weight would cut thru the wind more comfortably.

At around 9:00 AM that morning, the morning sun was starting to break the chill of the early hours, so I decided to head into the city for a relatively early start. My plan was to fish until midday and then get back to my normal day's activities.

It only takes me about 30 minutes of driving to get to the parking spot that I had in mind that day, so this was nice. While driving into Calgary, I had plenty of time to think about fly patterns and how I would fish the creek that morning. So by the time I had parked my truck and grabbed my fly fishing gear, I knew exactly where I was headed.

The most effective method of fishing a streamer would be to hike upstream and then fish back down towards my truck. So after a short walk on one of the City of Calgary path systems, I found myself looking over a very fishable looking piece of stream.

There was still a shelf of shore ice bordering some areas of the stream, so I was careful if I was going to get lucky enough to catch a trout. My net handle was short and netting a trout beyond the shore ice can be a challenge.

It took me approximately three quarters of an hour before I hooked into a brown trout. This was very surprising, because I didn't have great expectations for my luck that day. Immediately, I knew that the trout was a monster. It's powerful, lethargic strength was typical of a late fall caught trout, the cold water had numbed the fish's metabolism.

This was a very exciting experience. Never before had any brown trout been caught this far up the system, at least to my own knowledge. Not only this, but the brown trout was huge. When it first came near the surface of the relatively clean, clear water, I could see that it was approximately 19 inches in length.

The battle with the trout continued for a few minutes before I could finally start to lead the trout upstream to a safe netting spot along the shore ice. When I did get into a position to net the trout, I was having great difficulty in steering it into the net hoop. I have a net with a 16 inch hoop, but this trout was just a little too big to make the job easy.

Once the trout was wrestled into the net, I laid the fish out for a few photos and then safely released it back into the creek. This was the largest trout I had caught in West Nose Creek, after only a few trips to fish the stream. It didn't sink in until after the trout was back in the water, just how large that brown trout was. I was thankful that I had managed to take a few photos for my records.

After I got home that day, I downloaded the photos and mapped the location where the trout was captured. This trout was caught approximately 9 Kilometres upstream from the confluence of West Nose Creek and Nose Creek. This is the furthest upstream on West Nose Creek that I have documented a brown trout so far.

This is great news for our riparian restoration work on West Nose Creek, in the City of Calgary. If we can continue to plant trees and willows along the stream, then the benefits to the fishery will be tremendous. More willows and trees means more shade and cover for trout. Knowing that there are trout now available in the stream, this adds a significant importance to our long term goals on West Nose Creek. I look forward to doing some more exploring on this stream this year.

### How Did I Catch The Huge Brown Trout?

As is typical of most Fly Fisher's, you are probably asking yourself how I managed to catch the huge brown trout on West Nose Creek. I don't mind sharing this information, seeing how you have been dedicated enough to read this far thru in my magazine, you deserve a little insider knowledge.

In the December issue, I mentioned my first fly fishing experience on West Nose Creek, in the City of Calgary, last fall. On that trip to the stream, I managed to hook into 5 brown trout. I happen to be using streaming wet fly patterns. These patterns are featured in my third book titled "Streaming Wet Flies and a Fly Angler's Full Season".

On this fall trip in October, I was also using a streaming wet fly pattern called a "Red Streamer". This is featured in the book. Like all of my winter trips to fish for lethargic trout, I like to fish deep and slow. I call this "Dredging for Trout".

Late fall trout stay deep and remain lethargic during the cold winter months. This energy saving trait is part of their natural survival mode in a time of year when conserving energy can mean making it thru until the insect hatches of spring start to happen.

I mentioned in the article above that I was using a 6 weight fly rod, with a fast sinking number 3 fly line. The number 3 sink rate is just about right for the depth of West Nose Creek. It will allow a slow retrieve at a depth of approximately 3 or 4 feet below the surface.

My streaming wet fly patterns are great hunting flies. When I plan on finding trout in small creeks, when there is not insect activity, I will go to streaming wet fly pattern and search for fish. Sometimes the color of pattern is critical, but I have found that most of the brown trout patterns are pretty effective in most cases.

The most common hook size for tying this fly pattern is a size 8 streamer hook, with a 3X shank. I tip my fly line with an 8 lb. fluorocarbon leader that is approximately 3 feet in length. The fluorocarbon leaders are fantastic sinking leader material and it will be plenty strong for those real live huge brown trout that have a very sharp teeth.

Because the take of a lethargic brown trout is relatively less aggressive as warmer water strikes, you have to make sure that you set the hook good, on any take.



Above: I laid out the brown trout for a few quick photos prior to its release. The brown trout was approximately 19 inches in length and it was in great form for this time in the year. I expect that there is plenty enough food to support such fish in the stream. Hopefully, the abundance of food will increase over time, as more willow and tree plants will boost the amount of both aquatic and terrestrial insects in the eco-system of West Nose Creek.



### "A Major Boost to My Enthusiasm for the Riparian Program"

HOME

Every now and then, an experience that I have on a project stream will need that helps build the will occur motivation to continue pursuing a long term objective. It may be the result of seeing the growing crop of native willow and tree plants that have been planted, or it may be making a surprising discovery about the potential of the fishery.

Catching a large trout where you may have previously thought it impossible is one of those experiences. Now that we know that there are wild trout to protect, the pursuit of a goal of doing comes and now I can include the program. This has often been the case on Bigbill Creek, after many years of work and now I can include West Nose Creek as well.

I know that in approximately 4 or 5 years, the plantings on West Nose Creek will start to become more noticeable and the benefits of more riparian willows and trees will

start to take effect. This is something that I look forward to witnessing on West Valley.

In the 2016 Bow Valley Riparian Recovery and Enhancement Program, I already have 5,892 native willow and tree plants committed to be planted along the stream banks of all three streams in the program. I am hoping that this number will grow significantly by the start of spring. This is a great start to this year's efforts.

A considerable number of plants will be planted on new stream bank on West Nose Creek, but the plan is also to do another planting on a portion of last year's program. This is how the long term results will come, by putting a lot of plants in the ground along the water's edge.

As I covered approximately 1.5 kilometres of stream channel, fishing that day in October, I observed a lot of plants from both the 2014 and 2015 planting season. The 2014 plants are approximately 2 feet in

height and they are looking very good. Last year's plants are still relatively small, but by the end of this upcoming growing season they will also be easy to spot along the stream banks.

I can already envision the creek's transformation over time. Once the stream banks are partially hidden by the cover of willows and trees in future years, there will be lots of song birds during the spring and summer months, with plenty of shade and cover over the water of the creek.

In future years, branches and downed tree trunks will make their way into the stream channel and this is when the largest benefit to the fishery in the stream will occur. More fish habitat and improved stream channel flow dynamics will transform the creek into a more productive habitat for the resident brown trout, and other potential trout species that find their way into the stream.

