Urban Forestry



2019 Urban Forestry-related activities

- Tree trimming and pruning activities continue throughout town, with neighbourhoods targeted annually
- **Stettler Trees** information posters (and short videos) created and shared via social media to assist residents with selecting good trees for Stettler
- Some different species of trees were used on Main Street
- The *Stettler Community Orchard (Phase 1)* has approximately 200 trees and shrubs (14 different species, with multiple varieties), to demonstrate different options, as well as tree an otherwise empty park 28,000 square feet of space
 - **Phase 2** of the orchard added additional Fruiting shrubs (3 different species, 7 different varieties) 12,000 square feet of additional mulched space
- Some of the streetscaping and road work includes making streets narrower and increasing their green footprint
- Adding additional trees and shrubs to West Stettler Park, as part of Top 5 Strategic Priority activities
- Adding different species of trees in street tree locations

URBAN FORESTRY

Urban forestry includes the efforts of the municipality, businesses, institutions and residents with regards to written policies, by-laws, standards for tree management (selection, planting, and maintenance), long and short-term management plans, tree replacement policies, pollinator-friendly tree selection, tree inventory, and Integrated Pest Management (IPM), heritage, memorial and commemorative trees.

	Max	Actual
Municipal	-	
Overall Impression Overall impact, benefit and first impression of the urban forest	10	7.75
<u>Strategic Plans</u> Policies, regulations and tree by-laws, tree protection and planting on public and private lands	15	13
<u>Urban Forestry Plan</u> Plan, design and inventory management including integration with overall green infrastructure landscape plan, and measures to preserve, protect, manage and expand overall tree inventory, including woodlots	20	17
<u>Plan of Action</u> Procurement, species diversity (including native trees), selection of hardy and pollinator habitat tree species, recommended tree list and tree planting standards.	10	7.5
Integrated Pest Management (IPM) / Plant HealthCare (PHC): plan of action for invasive pest detection and control, information on current infestations and diseases	10	8
<u>Public Information Programs</u> Provides information on good planting techniques, best practices and maintenance programs	15	12.75
Maintenance Quality Best practices with demonstrated results	10	7
Qualified Resources Qualified personnel (including seasonal staff and/or qualified experienced contractors) and/or in place training programs	5	3.75
Business & Institutions		
<u>Tree inventory</u> Contribution to expanding overall tree inventory, with consideration of design and diversity including native and hardy species of trees, on properties owned by businesses and institutions.	15	13.25
Maintenance Quality Programs, best practices with demonstrated results: watering, pruning, IPM	10	8
Residential		
Tree Planting Contribution to expanding overall tree inventory, with consideration of design and diversity including native and hardy species of trees on residential properties	15	13.5
Maintenance Quality Best practices with demonstrated results	10	8.25
Community Involvement		
<u>Public Participation</u> Participation (including children/youth) in tree planting and conservation programs such as Green Streets Canada, Arbor Day, Maple Leaf Day, and other tree planting and maintenance programs and activities on public lands (including promotion, organization etc.)	20	17.5
Community Support Financial and/or in-kind or participation or promotion by the municipality, businesses and institutions for community tree planting and conservation programs on public lands	10	8.5
Urban Forestry Total	175.00	145.75

URBAN FORESTRY

Observations:

The Main Street on Stettler has a good number of trees planted along the side walk all in nice size tree wells. The newly created Carl Stettler Park is well treed as well. These all look to be in good shape and doing well.

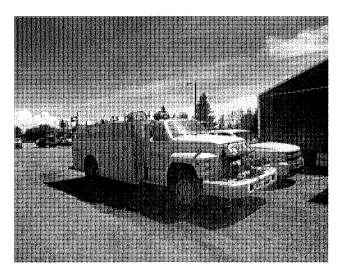
The private residents are well treed and on the whole well cared for.

Memorial Park has a well-established urban forest. The Mugo pine is especially nice and is being well pruned.

The new plantings in the outdoor school area are well done and will provide shade in the future as well as add to the general appearance of the outdoor classroom.

The use of the older fire truck for watering newly planted trees is novel and it is good to see that the truck can still contribute to the community.





2018 Evaluation Form

Recommendations:

Given the Dutch Elm disease is in the west and that the Emerald Ash Bore is working its way west keep planting a variety of trees. A good resource for checking the suitability of trees in your area is at <u>www.prairietrees.ca</u>. Have a look at the site.

Consider acquiring the services of an arborist to provide workshops for residents and Town staff, as well as dealing with some of the trees that need work. There might be some testing done of soil in various areas to help determine best types of trees to plant.

The use of "gator bags" (water bags) to help newly planted deciduous trees get established is always good along with staking to prevent wind damage. The SRC parking lot is a big expanse of open asphalt, consider establishing some plantings to visually break up the area and help delineate parking rows. This has already been done in some of the downtown parking areas. This will help with the tree inventory and give the SRC a better visual appearance.

The community has a good number of trees but there appears to be a problem with the health and survival of a number of the inventory. Memorial Park has a nice variety of trees and shrubs and in this area they seem to be doing well given the plow wind that took down two trees. The tree that you are trying to save looks like it will not survive, being weakened it has been attacked by pests. It should be removed so as not to give pests a breeding place.

There are a number of trees in the community that have sucker growth. We suggest that these be removed. When it comes to pruning remember the "3 D's: remove dead, damaged, and diseased branches

In the fall or when appropriate consider having a harvest festival gathering community together to enjoy the bounty of the orchard. Please include children as they will need to be involved in the orchard in order to take some ownership of the area. Here again staking and using gator bags will greatly assist the survival of the newly planted trees. The lattice fence and plantings on it will break some of the wind but newly planted trees need help.

Urban Forestry

HBC & TOS Video – Urban Forestry

Pruning programs / strategies

The former (recently – Spring 2018) Parks and Leisure Services Director was a trained arborist and staff are trained each year in proper pruning techniques and safety. Pruning techniques for Dutch Elm Disease Prevention are practiced, and DED is monitored for, as a part of the provincial DED monitoring program.

In 2011 through 2013, the amount of **street tree pruning** was increased significantly, with at least 2 months of pruning performed in the fall or late winter. Pruning was focused on removing deadwood and raising the heads of street trees. Additional pruning is undertaken annually, mainly to remove damaged material.



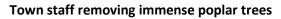
Residential Tree Trimming, Removal or Stump Grinding

Town residents are encouraged to **report trees with broken limbs or branches**, or other issues (disease, insects, etc.). Residents can phone Parks and Leisure Services or the Town of Stettler Office to report specific locations. Reports are responded to promptly. Reports can also be submitted via an on-line form. A tree form is the Public's communication document to tree problems and requests.

Link to Tree Trimming, Removal or Stump Grinding Removal Request Form

Invasive or less suitable trees (e.g. cottonwoods) are gradually being replaced with better species. Fuzz producing poplars and poplars causing damage are removed. Approximately 15-20 Poplars are being removed yearly on the boulevards. They are being replaced with Green Ash or other, more suitable species. Trees prone to Black Knot are also being replaced, either by businesses or town, depending on location.







You said it – We DID it!

Tree inventory / Species overview

Soil quality and climatic restrictions are limiting factors in the number and types of trees that are part of Stettler's urban forest. Stettler has a number of tree lined streets consisting of large American elms and Green ash. Other species are used elsewhere, if possible and suitable. Some of the new trees that were planted in the renovated "Try to avoid monoculture and plant more diverse species, wherever conditions permit."

Other species are being planted around town, including in the downtown – e.g. Little Leaf Linden, Paper Birch, Swedish Columnar Aspen and American Elm are all species featured on Main Street. Other species are being used around town as well.

streetscape on Main Street are **different species** than typically planted, however options are restricted/limited. **Alternative tree species** are being used around town, including Little Leaf Linden, Ohio Buckeye and different maples.





Treed neighborhood of Stettler

Tree-lined streets of Stettler – Elm & Green Ash

Tree inventories have been considered but are currently not in place, other than an inventory of the elm street trees, as a part of the DED management plan. Future efforts to create a comprehensive tree inventory will be evaluated when resources permit.

In some areas (e.g. West Stettler Park), planted trees are typically not successful, therefore, **naturalized seedling growth (natural groves) is encouraged**. Only hardy trees and woody plant material are planted. As the groves develop,



the undergrowth is cleaned up to create a tidy area.

You said it - We DIDN'T do it (YET)!

"A tree inventory would be a helpful tool to determine the age, species and condition of your current tree canopy..."

"A tree inventory should be regarded as a valuable asset that will save time with tree maintenance, etc..."

This has not been done, to date, due to resources, etc., but will be considered for future. It is a priority.

Currently, there is a **high priority plan** to add more trees to West Stettler Park, using proven techniques.

NEW in 2018/2019

Limiting soil quality issues have been overcome with some success through the use of raised

Combination planted & "naturalized" grove

You said it – We DIDN'T do it!

"We were told that local soil conditions make tree longevity a challenging proposition. Yet several streets had magnificent canopies of old trees... Soil tests may also be valuable to determine whether soil amendments should be added."

Soil testing has been done in most of town to give a picture of what we are facing. Amendment is a long-term proposition that is being done gradually in some parks. Larger trees are in better soils. We'll just keep doing the best that we can. berms for planting. Trees are planted at the top of constructed berms to allow trees some buffer between poorer quality layers of soils. Tree beds rather than rows are being developed throughout town.



Berm planting system

Street replacement /

improvement projects include **narrowing streets** to **widen the green belt/footprint** under existing trees, rather than removing large, beautiful specimen trees.



Street replacement – 50A Avenue – narrowed street with widened green footprint



Street replacement – narrowed street with widened green footprint

Walking pathways are hard landscape features that crisscross the entire town. Trees have been planted to add variety to some pathways that run adjacent to the highway.

Tree Information

50 **tree markers** were purchased in 2013 by the Heartland Beautification Committee to allow labeling of trees in various parks, starting with Memorial Park. Tree common names and Latin names are included and stakes have been installed gradually throughout town.



Trees planted along highway and walking paths

You said it - We DID it! (or we will)

"We would urge you to plaque and name your Heritage Trees"

HBC purchased 50 plaques on stakes that are labeled with common and Latin names of the various trees. Plaques are being mounted around town in various parks.

"Celebrate your Mugo pines and huge Mayday tree and identify them in a durable, lasting fashion."

We haven't been able to do this yet. But we'll work on it.

You said it - We DID it!

"An important addition to the town website might be a list of recommended trees for property owners. In addition, tips for planting and pruning could be included..."

A series of information posters of recommended trees (and large shrubs) has been developed under the brand of Stettler Trees. These are being released through the HBC Facebook page and housed on the TOS website. They include features, as well as things to watch for with each specific selection.

You said it – We (sorta) DID it!

"Playgrounds, parks and sports fields are in desperate need of trees or shade structures to screen the sun on hot days."

We know. And we've planted hundreds of trees over the years, which do not survive (for the most part) in our poor soils. We keep trying (different things). Because we're stubborn like that. NEW in 2017/2018

A series of **recommended tree and (large) shrub information posters (and short videos)** were development by members of the HBC, under the **Stettler Trees** brand.

This list outlines species that are suitable for Stettler, including information on size, use, interesting characteristics, as well as negative characteristics. A number were completed in the Summer of 2017



and were shared on the HBC Facebook page and put on the TOS website. Short videos, highlighting top picks, were also shared in the fall.

Pest Management Programs / Strategy

Stettler is a participant in the **Dutch Elm Disease monitoring / prevention program** run by the Society To Prevent Dutch Elm Disease (STOPDED). Town staff installs and collects the beetle traps for STOPDED.



You said it – We DID it!

"Consider holding training workshops on detection and management of native and invasive pests and diseases." A "Critters and Crud" workshop was offered on a Saturday in early August 2015 – information was provided to participants – repeats will be offered

Public trees are regularly pruned for

removal of diseased material, particularly Black Knot of *Prunus*. Town staff will send out information to homeowners that are have affected trees, regarding the importance of managing Black Knot and how to remove and dispose of diseased material. Links to other relevant information on pests (government articles and factsheets) are provided on the Town of Stettler website.



Examples of Stettler Trees Information poster



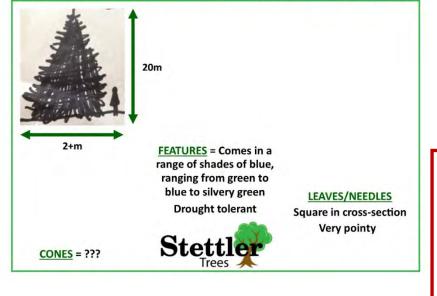
You said it – We DIDN'T/DID do it

"The dreaded birch tree minor is affecting a tree [on Main Street]. In fact a visual inspection of all trees on the street should be checked for their health status. If infected, urgent treatment is recommended..."

We do watch for trees that are less than their best and visit and assess trees that are pointed out to us. Treatment options are extremely limited and, most of the time, nothing can be done.

Link to Tree Issue Information on Town of Stettler website

COLORADO BLUE SPRUCE (Picea pungens)



You said it – We DIDN'T do it!

"To help prevent spread of tree pests and diseases, encourage campgrounds to not allow firewood to cross municipal boundaries..." This has not been done, as the responsibility for exclusion of pests falls under provincial (and in some cases, federal) legislation (Alberta Pest Act)

You said it – We DIDN'T do it!

"Try to diversify with native trees... It would be a great idea to start detection for Emerald Ash Borer (EAB)..."

EAB detection will fall under Federal, then Provincial jurisdictions and direction.

Diversification with native tree species will be encouraged as much as is possible, given climatic and species choice limitation.

You said it – We DIDN'T do it!

"Consider having the municipality, rather than the developer, decide how many and what type of trees should be planted..."

In general, the municipality prefers to give information and rough direction rather than dictate to developers.

Current development requirements do require developers to have a certain amount of green space and vegetation per developed area – e.g. Atco Electric site required a certain number of trees planted to off-set the paved space required for their facility; WSP mirroring project will see major greenspace development

Tree Parks

Memorial Tree Park – the focus of this park is trees that were purchased in the memory of a loved one. Located adjacent to the Stettler Cemetery, it features a central mulched bed, a dedicated granite plaque and a cedar gazebo. Tree species are varied to add diversity (purchasers do not select a specific tree and trees are not marked specific to purchasers).



Memorial Tree Park

Rotary Millennium Tree Park – Rotary Millennium Park was planted in 2000 by students of the Stettler Elementary School as well as members of the community. The park was established using donated funds, with thousands of small seedling trees and shrubs planted in a large mulched block. Large boulders were placed to add a vertical presence. The trees and shrubs have grown quickly, forming a forested park. Pathways were cut out to wind through the park. Minimal maintenance is required. Visitors can walk in the shade, sample fruit from some of the trees and enjoy the diversity of species. Mulch pathways are replenished regularly. Gradually, Parks staff members have been cleaning up dead trees, which opens up the space.





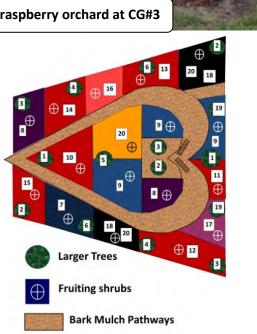
In 2013 and in 2014, the HBC (Community Gardens sub-committee) designed (and redesigned) a community orchard expansion for the Rotary Millennium Tree Park. It included components which would upgrade signage in the park and provide enhanced features. However, the project was never successful in getting grant funding, so the project never proceeded. A community orchard component was included in a third Community Garden site funding application to the TD FEF grant. A portion was approved (the tree/shrub part), and the money was used to plant over 200 fruiting shrubs at each of 2 community gardens (that did not have fruit), resulting in over 4000 sqft of mulched orchard space added. They are growing nicely and are producing fruit for the public. In 2017 (into 2018), plans were developed, refined and fundraising efforts commenced to create a formal Community Orchard, with Phase 1 of the project being created in Summer 2018, and Phase 2 in 2019. The total area is around 40,000 square feet. (see section on Community Orchard in Landscape chapter).



Mulched Haskap, raspberry, black currant, sour cherry orchard at CG#1



Mulched raspberry orchard at CG#3



Benches



Proposed Community Orchard -**Rotary Millennium Tree Park** expansion

You said it – We ARE DONE!

"We would encourage the planting of a community orchard beside Tree Park. Keep applying for available grants..."

"The new community orchard has been years in planning. Funding has been one of the obstacles to its inception. Consider offering fruit trees as memorial trees to complement the existing memorial tree program"

We have kept looking for way to expand our community orchards, formally and informally. We've created multi-use plantings and areas that allow us to accomplish a range of goals in one project.

In 2017, a plan was drafted to create a Community Orchard that would be largely funded through donations by businesses or anyone. This would include materials, cash or labour. We've raised over \$45,000+ \$60,000 to date (mostly from local donations, plus 1 grant) and the Phase 1 of 2 was built in 2018, comprising over 1500 trees, shrubs and perennial flowers. Phase 2 was completed in 2019. *IT'S BIG! IT'S AWESOME! IT'S AMAZING!* **Memorial Park** – This park (with cenotaph) is recognized as one of the Wonders of Stettler

(informal community vote), with some distinctive feature specimen trees, including some huge mugo pines, a massive May Day tree and a range of other species. Pathways wander through the hedged park. This park is often used for photographs and is maintained (in part adopted) by a family cluster living nearby. In 2013, trees were labelled using **tree markers** inserted in the ground at their base.





West Stettler Park – due to the challenging soils, this park has natural seedling groves that develop in a naturalized planting/growth strategy. A large number of trees were donated, planted and mulched by Brennan Autobody, on the Northwest corner of WSP, in 2017. A strategic plan is underway to develop West Stettler Park further, with additional trees and other features. A survey was conducted on Facebook and work will be done in the next year or two.



Mulched Bed in West Stettler Park

Pioneer Park – the majority of trees were donated from a local farmstead years ago, with the site being developed over time, to include a **perennial-filled monument bed**. Shale pathways crisscross the park. A large **old-fashioned thrashing machine** sits on the north east corner of the park.



Trees in Pioneer Park

You said it – We DID it (already)! (and will add to it, of course)

"Given the Dutch Elm Disease is in the west and that the Emerald Ash Borer is working its way west, keep planting a variety of trees..."

We try and diversify our tree planting as much as we can, what with the soil and climatic limitations that we are faced with. We have been planting several new species on the streets around town, instead of our usual "big 2".

As we experiment a bit more, and new material is developed, we hope to shake things up somewhat. In the meantime, we're keeping an eye on the trees that we have.

You said it – We're DOING it (and will add to it, of course)

"There are a number of trees in the community that have sucker growth. We suggest that these be removed. When it comes to pruning remember the "3 D's": remove dead, damaged, and diseased branches."

We'll pass that on to our awesome Parks staff to handle. They are very diligent in quickly correcting dead and damaged material, and keep an eye out for problems. They respond to and assess every complaint or concern submitted and also work as proactively as they are able.