

TOWN OF OKOTOKS

Urban Forest

2011 Progress Report

Prepared by

Town of Okotoks Open Spaces Urban Forestry (UF)

April 20, 2012

TOWN OF OKOTOKS Urban Forest Management Plan 2011 Progress Report

TREE WATERING REPORT:

Table 1: TOTAL TREES WATERED

	NO. of TREES	NO. of	NO. of	TOTAL NO.	
	>5 YEAR OLD		TREES	of TREES	
YEAR	(-)	FAC'D	PLANTED	WATERED	
2006	no data	no data	183	2,381	
2007	no data	no data	242	2,623	
2008	109	485	188	3,187	
2009	114	450	163	3,686	
2010	225	359	335	4,155	
2011	1,054	457	205	3,763	

Notes: 5 yr. old trees are subtracted from the previous year's total.

HAZARD TREE REPORT:

A major portion of the Town's older age class trees (>30yrs) were assessed in 2008 and these trees will be assessed again in 2012 in conjunction with their next scheduled pruning.

Proactive assessments were conducted in the river valley along the Heritage Parkway. A total of 241 trees were pruned to reduce the risk of tree failure over the pathway system.

Four dead trees were removed in natural areas along pathways; two behind 27 Sheep River Heights and two on Heritage Parkway.

Table 2: HAZARD TREES IDENTIFIED

Year	Total Trees Identified	Removed	Surgery	Pruned
2008	31	25	5	5
2009	17	16	0	1
2010	57	4	1	0
2011	11	10	1	0

Table 3: TREE STEM AND BRANCH FAILURES

	Stem	Branch Failures > 4			
Year	failures	inches	Removed	Surgery	Pruned
2008	1	3	0	1	4
2009	2	12	3	0	11
2010	0	6	0	0	6
2011	3	20	3	0	20

Note: Three failures resulted in damages to private property. Two damaged fences and one vehicle.

CLEARANCE CONFLICT REPORT:

The roadways with town owned trees that have been pruned for clearance in 2011 include Elma St., Suntree Lane, 100 – 500 Suntree Pl., McRae St., Crystal Green Way, Banister Dr., Okotoks Dr., Elizabeth St., North Railway St., Milligan Dr. (median west of Okotoks Dr.), Sheep River Cove, Cimarron Meadows Way, Cimarron Common and Woodhaven Dr.

There were 27 requests for clearance in 2011. Twenty of the conflicts were Town trees and 7 were private trees. Urban Forestry (UF) has completed 19 of the requests with one in progress. Owners of the private trees have been issued a request to correct the conflict according to our clearance guidelines.

All pathway clearance along park pathways was done by our Urban Forestry Department.

TREE INVENTORY REPORT:

There were approximately 1200 trees added to our inventory and a contract was awarded to develop our database. The database was overdue but is now just been completed in Dec. 2012. We are now ready to test and implement the database. Prior to 2011, 8,500 trees were inventoried and mapped since 2007. Information collected is tree species, trunk diameter at standard height (DSH = 1.4 meters above ground level) and condition (percent of deadwood in the canopy). To date the maps are proving useful for planning, budgeting, and field work. Our estimated inventory is approximately 12, 000 trees.

PRUNING REPORT:

In 2011, approximately 1,935 trees were pruned. Of the total number of trees pruned, 1,122 were contracted out and 813 were pruned by our Urban Forestry

department. Primary locations targeted were the cemetery, Crystal Ridge, Downey and Tower Hill. All species were targeted in these primary locations and all trees were pruned to manage disease, pests, hazards, clearance conflicts and young tree training. Species targeted include green ash and elm on the boulevards in Suntree, Okotoks Dr. and Elma St. Poplar were targeted in Sheep River Park, Lions campground, Maxbell Parkway and Heritage Parkway. Species targeted were pruned for pests and disease, clearance and for risk reduction.

TREE REMOVAL AND PLANTING REPORT:

Urban Forestry's has achieved the Town's goal to plant at a 1:1 ratio for every tree removed less than 15cm DSH (diameter at standard height) and a 2:1 ratio for every tree removed more than 15cm DSH. Total number of trees planted includes what Open Spaces planted collectively plus town related projects

TOTAL TREES PLANTED VS. PLANTING TARGET

YEAR	TREES REMOVED	TREES REMOVED <15cm	TARGET PLANTING	TREES REMOVED >15cm	TARGET PLANTING	FINAL TARGET	TREES	CARRIED
		DBH	1:1	DBH	2:1	PLANTING	PLANTED	DIFFERENCE
2002	3				6	6	110	Plus 104
2003	95				190	190	25	Minus 61
2004	72				144	144	130	Minus 75
2005	93				186	186	201	Minus 60
2006	93				186	186	183	Minus 63
2007	90				180	180	242	Minus 1
2008	163	137	137	26	52	189	301	Plus 105
2009	303	275	275	28	56	331	163	Minus 168
2010	194	169	169	27	54	223	335	Plus 112
2011	157	103	103	27	54	157	205	Plus 48
TOTAL	1,263	684	684	108	1,108	1,792	1,895	Plus 103

NOTE: Number of trees planted does not include FAC'd trees in new development. Included in the total trees planted is 13 shrubs (5 shrubs = 1 tree) which is equal to 2 trees.

MULCHING REPORT:

Approximately 100 m³ of mulch was distributed by Open Spaces. This was part of our re-mulching program which attempts to maintain a 4 inch layer of mulch around the trees and in the beds. This represents approximately 2,500 trees.

INSECT PEST REPORT:

Yellow Headed Spruce Sawfly

- Inspections on spruce revealed numbers above our threshold level
- Affected trees with more than 20% of the needles defoliated were sprayed.
- Inspected approximately 1200 spruce trees throughout town parks and treated 855

Cottony Psyllid (plant lice)

- No treatment was required this year on the black ash on Elizabeth Street.

European Elm Scale

- No treatment of elm scale

Western Ash Bark Beetle

- Pruning is the method of control used to manage this pest
- All the green ash on town property have been targeted once since 2008 and regularly scheduled pruning (once / 3 years) should keep this pest manageable.
- Banding trees with tangle foot (sticky substance around the trunk) will be looked at as a cultural control method for trapping the insect in the future.

DISEASE REPORT:

Black Knot

- Approximately 500 Schubert chokecherries and other susceptible species were inspected
- All visible signs of black knot were removed
- About 31% of the trees (155) were infected
- Diversifying tree species in new or replacement plantings will also help manage this disease.

Hypoxylon Canker

- Pruning is one method of control used to manage this disease
- Almost all the Town's poplars have been pruned since 2008 and regularly scheduled pruning (once/3 years) will help manage this disease.
- Diversifying tree species in new or replacement plantings will also help manage this disease.

Fireblight

- Pruning is a primary method of control used to manage this disease
- Almost all the Town's Crabapple and Hawthorn (approx. 750) have been pruned since 2008. Without annual pruning maintenance, these trees are susceptible to major die back.

- Diversifying tree species in new or replacement plantings is the primary way of managing this disease because pruning annually is associated with high costs.

Cytospora Canker

- Pruning is one method of control used to manage this disease
- All the Town's spruce (approx. 1,238) have been pruned since 2008 and regularly scheduled pruning (once/3 years) will help manage this disease.
- Diversifying tree species in new or replacement plantings is the primary way of managing this disease. Pine, larch and Rocky Mountain Juniper are being introduced in new plantings and replacements.