

THE REGIONAL DISTRICT OF EAST KOOTENAY
MOSQUITO CONTROL PROGRAM
WASA/TA TA CREEK/SKOOKUMCHUCK MOSQUITO CONTROL EXTENDED SERVICE
AREA

SEASON END REPORT
DECEMBER 2011

PROGRAM STAFF:

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CONTAINING:

Summary of 2011 Season Activities

Morrow BioScience Ltd.

SUMMARY OF ACTIVITIES

The 2011 season was an extremely busy one throughout the province for mosquito control and the Wasa, Tata Creek and Skookumchuck area was no exception. In Spring 2011, the snow pillow in the mountains of the Kootenay River watershed was extremely high (close to twice the average for that time of year). The mosquito control season started with cool weather during the month of April, resulting in a slow snowmelt and gradually rising river levels. Starting in early May temperatures warmed considerably resulting in heavy melt-off and a series of successively higher river level peaks starting May 27th until July 1st. This season the river was at elevated levels right through from mid May until mid July.

Ground applied treatments started during the third week of May and continued until the scale of flooding necessitated aerial treatment. The first aerial application was performed on June 14th and another 6 days of aerial treatments were required after that date in order to maintain control of larval mosquito populations. This season a total of 2,461 hectares were treated, well above the 900 hectares included in the base contract.

Given the extent of the flooding this season, adult mosquito populations were maintained at tolerable levels for most of the season. Without the extraordinary control effort, adult mosquito annoyance levels would have been extremely high making most outdoor activities impossible.

Larvicide Applications

DATE	LOCATION	QUANTITY APPLIED (kg)	AREA (ha)	APPLICATION MODE
May 25	Skookumchuck	31.85	5.31	Blower
May 25	Bearclaw Ditches	40.95	6.83	Blower
May 31	Station House	27.30	4.55	Blower
May 31	Thunderhoof Culvert	36.40	6.07	Blower
May 31	Thunderhoof Ditch	27.30	4.55	Blower
May Total		163.80	27.30	
Jun 9	Highway Sloughs	54.60	9.10	Blower
Jun 9	North of Thunderhoof along tracks	18.20	3.03	Blower
Jun 9	West side hwy between Wasa & Thunderhoof	54.60	9.10	Blower
Jun 10	Sweet Tooth	109.20	18.20	Blower
Jun 13	E & W side of tracks at satellite dish	18.20	3.03	Blower
Jun 13	Green house behind sawdust pond	18.20	3.03	Blower
Jun 13	Pond across from Whyte property	18.20	3.03	Blower
Jun 14	Prairie Road Block	400.40	66.73	Aerial
Jun 14	S end of thunderhoof along river to edge of Bummers Flats	145.60	24.27	Aerial
Jun 14	Thunderhoof railway channels from tower to Bummers Flats	163.80	27.30	Aerial
Jun 14	Colins field	236.60	39.43	Aerial
Jun 14	Ford field	309.40	51.57	Aerial
Jun 14	Sweet Tooth	254.80	42.47	Aerial
Jun 14	Thunderhoof slough	72.80	12.13	Aerial
Jun 14	Channel with 2 trees landmark	145.60	24.27	Aerial
Jun 14	Aushroom slough	72.80	12.13	Aerial
Jun 15	Gradon Ford property	72.80	12.13	Aerial

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Jun	15	2nd field wit 2 trees landmark	36.40	6.07	Aerial
Jun	15	Thunderhoof slough (further into trees)	18.20	3.03	Aerial
Jun	15	Bob Jameson property	91.00	15.17	Aerial
Jun	15	Buddenhagen property	72.80	12.13	Aerial
Jun	15	Harbour property	72.80	12.13	Aerial
Jun	15	Elgerts property	91.00	15.17	Aerial
Jun	15	Edge of Colins property	72.80	12.13	Aerial
Jun	15	Railway bed (Ta Ta Creek to Moan Rd)	36.40	6.07	Aerial
Jun	15	Bearclaws property	309.40	51.57	Aerial
Jun	15	Chatterson slough	36.40	6.07	Aerial
Jun	15	Moan subdivision	145.60	24.27	Aerial
Jun	15	Muskrat Ranch	109.20	18.20	Aerial
Jun	15	Subdivision across from Greens	36.40	6.07	Aerial
Jun	15	Minors property	145.60	24.27	Aerial
Jun	15	Slough at Skookumchuk bridge	54.60	9.10	Aerial
Jun	15	Skookumchuk island	18.20	3.03	Aerial
Jun	16	Sweet Tooth	54.60	9.10	Blower
Jun	16	Hansen channel along train tracks	9.10	1.52	Blower
Jun	16	Sawdust Pond	9.10	1.52	Blower
Jun	16	Field with 2 trees landmark	45.50	7.58	Blower
Jun	16	Thunderhoof slough	9.10	1.52	Blower
Jun	16	Thunderhoof field	9.10	1.52	Blower
Jun	16	Lower slough below dump road	9.10	1.52	Blower
Jun	16	Junction at Prairie Rd & Aushroom	18.20	3.03	Blower
Jun	20	Wasa main beach slough	18.20	3.03	Blower
Jun	20	Slough after main beach to campground	9.10	1.52	Blower
Jun	20	Rokosh property	9.10	1.52	Blower
Jun	20	Sloughs at the Whyte house	91.00	15.17	Blower
Jun	20	Hansen channel by Berg property	18.20	3.03	Blower
Jun	20	Channel parallel with 2 trees field	9.10	1.52	Blower
Jun	21	Slough between Prairie Rd & Thunderhoof along highway	45.50	7.58	Blower
Jun	21	as above - other side of highway	36.40	6.07	Blower
Jun	21	Field below dump road	27.30	4.55	Blower
Jun	21	Channel & Prairie Rd junction & Aushroom	27.30	4.55	Blower
Jun	21	Gradon Ford's very back slough by huge pond	54.60	9.10	Blower
Jun	22	Slough right after Thunderhoof holding pond	18.20	3.03	Blower
Jun	22	Above bird sanctuary where Lewis Creek comes in	18.20	3.03	Blower
Jun	23	Muskrat Ranch/ Moan slough	200.20	50.05	Aerial
Jun	23	Moan subdivision	163.80	40.95	Aerial
Jun	23	Sweet Tooth	327.60	81.90	Aerial
Jun	23	All along Uranus property from Dr. Greens	91.00	22.75	Aerial
Jun	23	Thunderhoof slough	200.20	50.05	Aerial
Jun	23	Thunderhoof field to start of program	218.40	54.60	Aerial
Jun	23	Field parallel with 2 trees field along river	200.20	50.05	Aerial
Jun	24	Haber's Field	182.00	45.50	Aerial
Jun	24	Thunderhoof	127.40	31.85	Aerial
Jun	24	Prairie Road edges	54.60	13.65	Aerial

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Jun	24	Elgerts field	9.10	1.52	Blower
Jun	24	Slough before Prairie Road/Aushroom Junction	9.10	1.52	Blower
Jun	26	Slough at Prairie Road junction	9.10	1.52	Blower
Jun	26	Pond at dump road	9.10	1.52	Blower
Jun	26	Elgert's field	27.30	4.55	Blower
Jun	27	Gradon Ford's property Between river & Colin's property along fence line and into trees	509.60	127.40	Aerial
Jun	27	Behind Colin's property along railway bed next to river	91.00	22.75	Aerial
Jun	27	Fields at dump road junction	118.30	29.58	Aerial
Jun	27	Field after sweet tooth	145.60	36.40	Aerial
Jun	27	Thunderhoof field	54.60	13.65	Aerial
Jun	27	Field from house at Thunderhoof to culvert	145.60	36.40	Aerial
Jun	27	Tree area across hwy from Thunderhoof holding pond	54.60	13.65	Aerial
Jun	27	Hansen channel and along Whyte house	109.20	27.30	Aerial
Jun	27	Muskrat Ranch	91.00	22.75	Aerial
Jun	27	Moan subdivision	72.80	18.20	Aerial
Jun	27	North end of Muskrat Ranch	145.60	36.40	Aerial
Jun	27	Uranus property across from Dr. Greens	36.40	9.10	Aerial
Jun	27	Elgerts property	163.80	40.95	Aerial
Jun	27	Colins property	127.40	31.85	Aerial
Jun	27	Haber property	163.80	40.95	Aerial
Jun	27	Buddenhagen property	109.20	27.30	Aerial
Jun	27	Doug Ford's property	145.60	36.40	Aerial
Jun	27	Jameson's property	109.20	27.30	Aerial
Jun	28	Jorgenson's property	18.20	3.03	Blower
Jun	28	Torvik's property	9.10	1.52	Blower
Jun	28	Slough by main beach	9.10	1.52	Blower
Jun	28	Slough down from main beach	27.30	4.55	Blower
Jun	28	Robinson's roost	9.10	1.52	Blower
Jun Total			8,444.80	1,761.61	
Jul	4	Sloughs at dump road junction (both sides of highway)	145.60	24.27	Blower
Jul	4	Slough across from Thunderhoof holding pond	18.20	3.03	Blower
Jul	5	Rim Thunderhoof	72.80	12.13	Aerial
Jul	5	Tree line along highway from Prairie Road to dump road	309.40	51.57	Aerial
Jul	5	In behind pond at dump road junction	163.80	27.30	Aerial
Jul	5	All open water at station house to 2 trees field and 2nd field	436.80	72.80	Aerial
Jul	5	Doug Ford's property	200.20	33.37	Aerial
Jul	5	Colin's property	163.80	27.30	Aerial
Jul	5	Slough behind old highway	236.60	39.43	Aerial
Jul	6	Trees at Whytes	218.40	36.40	Aerial
Jul	6	Berg property (Hansen channel)	327.60	54.60	Aerial
Jul	6	Doug Ford's property	200.20	33.37	Aerial
Jul	6	Moan subdivision	345.80	57.63	Aerial
Jul	6	Davis's property	291.20	48.53	Aerial
Jul	6	Bearclaw property	455.00	75.83	Aerial
Jul	6	Railway channels behind Colin's	200.20	33.37	Aerial
Jul	6	Leask property	36.40	6.07	Blower

Jul	6	Trenches along Lazy Lake Road	9.10	1.52	Blower
Jul	12	Ditches at Jorgenson's and along lake	9.10	1.52	Blower
Jul	12	Lakeshore to Whyte's	18.20	3.03	Blower
Jul	12	High water at Whyte's	18.20	3.03	Blower
Jul	12	Hansen channel along highway	18.20	3.03	Blower
Jul	12	Houses beside Robinson's Roost	18.20	3.03	Blower
Jul	12	Field at Leask's	18.20	3.03	Blower
Jul	12	Rokosh property	9.10	1.52	Blower
Jul	12	Lakeside across from Wasa Motel	9.10	1.52	Blower
Jul	12	Lakeshore towards highway	18.20	3.03	Blower
Jul	13	Doug Ford's property	54.60	9.10	Blower
Jul	13	Channel along Lazy Lake Road	9.10	1.52	Blower
Jul	19	Slough beside main beach by public washrooms	4.55	0.76	Blower
Jul Total			4,035.85	672.64	
Grand Total			12,644.45	2,461.55	

SEASON TOTALS

	QUANTITY APPLIED (kg)	AREA (ha)	APPLICATION MODE
	11,092.9	2,202.96	aerial
	1,551.55	258.59	blower
	0.00	0.00	hand
Grand Total	12,644.5	2,461.55	

DISCUSSION

In an effort to assist all areas in broadcasting a uniform message regarding mosquito control and WNV, Morrow BioScience Ltd. operates a comprehensive website. This site can be found at www.morrowbioscience.com. MBL would encourage people to utilize this resource to help answer any questions they may have. MBL would also encourage the RDEK to provide a link to this website from their municipal site for easy access to local residents.

A summary of costs for this season is as follows:

Base Contract (less pesticides):	\$55,000.00
Larvicide (80 bags):	48,773.73
Treatment over 900ha:	65,585.17
HST:	20,323.07
PST:	0.00
GST:	0.00
	<u>\$189,681.97</u>

A total of 12,644.5kg of larvicide or approximately 694.75 bags (18.2kg/bag) were applied to 2,461.55ha during the season. The season was started with 207.5 bags carried over from last season, there were purchases totaling 487.25 bags, and therefore there are 0 bags in stock for next year.

Plans for Mosquito Control Program Improvements – Future Seasons

- Strive to provide timely field information to RDEK staff to allow the program budget status to be closely monitored and informed decisions regarding approval of extra treatments (if necessary).
- Continue to liaise with the farmers who have control over opening Lewis Creek and coordinate the flow with the Kootenay River level.
- Explore solutions to the beaver issues associated with drainage culverts in the Wasa area.
- Muskrat Ranch should have a control burn to eliminate the numerous reeds and tall grass that prevent the larvicide from being most effective.
- It is proposed that Hansen's Channel have some trails cut in to enable easier ground access.
- Clean-up trails within the Prairie Road vicinity as overgrowth is making this area difficult to access and treat.
- The highway culverts require regular maintenance.
- Drainage on the Collins property would benefit from installation of a culvert.

If you have any questions regarding this summary report, please do not hesitate to give me a call at 604-986-1168.



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