



**COLUMBIA BASIN
FISH & WILDLIFE
COMPENSATION
PROGRAM**



EAST KOOTENAY YOUTH CREW

PREPARED BY

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FOR

Columbia Basin Fish & Wildlife Compensation Program

And



East Kootenay Youth Crew

Final Report - 2002



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1.0 INTRODUCTION

Early in 2002, the Nature Trust of British Columbia (TNT) and the Ministry of Water, Land, and Air Protection (MWLAP) jointly applied for funding from the provincial Habitat Conservation Trust Fund (HCTF) to complete maintenance and wildlife enhancement activities on their properties within the east Kootenay. Through their Operations and Maintenance program, the HCTF approved \$37,620.00 towards this project. In addition \$ 9,500 was secured from the Columbia Basin Trust (Community Environmental Assistance Program) and the Columbia Basin Fish and Wildlife Compensation Program (CBFWCP) through their Small Project Funding program.

The proposed activities to be undertaken on the TNT and MWLAP properties in the east Kootenay were:

- Manual control of noxious weeds
- Perimeter fence maintenance (inspect, install, repair) to limit public access and to prevent trespass by domestic livestock
- Removal of redundant internal barbwire fences
- Installation of access management signs
- Cleanup of garbage and other debris (e.g. tires, miscellaneous scrap metal).

To accomplish these activities, a crew supervisor and four crewmembers were hired and work commenced on August 19, 2002 (Table 1). Prior to the crew starting, the crew supervisor was responsible for establishing accounts with local businesses and purchasing tools, renting a vehicle, advertising for and hiring a crew, and becoming familiar with the various properties to be visited (Table 2).

The initial focus of the youth crew was on noxious weed control and removal of garbage and debris encountered during weed control activities. Following approximately three weeks of weed control, fencing and further cleanup activities were initiated on properties previously visited and on new properties located further from Cranbrook (e.g. Bar 40 Ranch in Newgate and Big Ranch near Elkford).

The crew typically worked five seven-hour days per week. This was changed to four nine-hour days per week when working in Newgate (due to long drive – 1.5 hours one way) and when working near Elkford (due to motel costs and long drive).

2.0 KEY DATES

Table 1. Key dates for The Nature Trust East Kootenay Youth Crew.

Date	Event
July 26	Crew supervisor hired by TNT.
August 13	Youth crew job interviews held.
August 16	Orientation day for hired crew.
August 19	First crew field day.
	Noxious weed training at Wasa and Bummer's Flats with Kevin Paterson – RDEK Noxious Weeds Coordinator.
September 6	Fencing construction training with Peter Woods (retired local fencing contractor).
September 13	Stream ecology and fish habitat restoration at Wolf Creek with Kenton Andreashuk – Stewardship Coordinator for the Columbia Kootenay Fisheries Renewal Partnership.
October 1	Wildlife enhancement/ terrestrial ecosystem restoration workshop at the Big Ranch near Elkford with Mark Hall – Forester (Majestic Resource Consulting).

October 25	Final crew field day.
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3.0 PROPERTIES

Work was completed on eleven different properties located throughout the east Kootenay area, with most being located within 50 kilometers of Cranbrook. Of the eleven properties, four were owned by TNT, six were owned by MWLAP, and one was Canadian Wildlife Service (CWS) property (Table 1).

Table 2. Properties Visited by the East Kootenay Youth Crew.

Property	Nearest Community	Ownership	*Person Days
Wasa and Cameron Sloughs	Wasa	TNT	20
Wolf Creek	Wasa	MWLAP	19
Lot 338	Wasa	MWLAP	20
Three Sons	Wasa	MWLAP	5
Whitetail	Bull River	MWLAP	21
Bummer's Flats	Wasa/ Ft. Steele	MWLAP	8
Cherry Creek Ranch	Cranbrook	TNT	38
Bar 40 Ranch	Newgate	MWLAP	45
Strauss Property	Newgate	TNT	6
Big Ranch and Musil Estate	Elkford	TNT	44
Columbia Wetlands	Invermere	CWS	6

*Based on a 7 hour day

4.0 TASKS COMPLETED BY PROPERTY

4.1 Wasa and Cameron Sloughs

Person Days: 20

Tasks: Noxious weed control, debris removal.

The Wasa and Cameron Sloughs are located within the community of Wasa. The primary task completed was pulling spotted knapweed. Some diffuse knapweed was also removed from the Cameron Slough area. In total, 82 large bags and seven unbagged truckloads of knapweed were removed from these properties. In addition to noxious weed removal, the crew also collected and removed various miscellaneous metal debris (including old oil drums) and old fence wire.

4.2 Wolf Creek

Person Days: 19

Tasks: Noxious weed control, garbage cleanup, perimeter fence maintenance.

The first tasks completed at the Wolf Creek property were removal of spotted knapweed and burdock. Noxious weeds were only encountered on the dykes separating Ducks Unlimited ponds and were present in relatively low numbers. Hand pulling of these weeds was successful and if continued in future years, weeds could be eradicated from the Wolf Creek property.

Following weed removal, a large volume of rusting metal debris from the deteriorating remains of an old barn (no longer standing) were removed. Additional garbage and three homemade toilets were removed from inside, and from the area immediately surrounding, an old cabin located near the DU ponds.

One day was spent cutting small trees (mostly young fir) that could interfere with the fence and repairing the west and north perimeter fences. Approximately 900 meters of the west perimeter fence was destroyed in a forest fire in 2000 and the wire was previously removed. It was beyond the scope of this project to reconstruct this section of fence due to time constraints and other priorities.

4.3 Lot 338 and Three Sons

Person Days: 20 (Lot 338) and 5 (Three Sons)

Tasks: Perimeter fence maintenance, removal of redundant internal fence, debris removal.

These two properties are located in the Wasa area and both border the Kootenay River. No noxious weeds were found on either property. On Lot 338, the perimeter fence was found to be in good condition but was overgrown with young fir trees on the east side. These trees were removed over approximately 3500 meters of fence (figure?). One section of the north perimeter fence was reconstructed in a steep gully using metal T-bar fence posts. Approximately 2000 meters of barbwire and three dozen rusting T-bar posts were removed from two redundant fences located on the Kootenay River floodplain.

On the Three Sons property, the fence was found to be in excellent condition along most of its length. The main problems encountered were broken and loose wires, and loose posts. Wire repair was completed where required and wooden droppers were wired along portions of the east and south fences.

4.4 Bummer's Flats

Person Days: 8

Tasks: Noxious weed control, garbage cleanup, kiosk maintenance, vehicle access control.

Weeds removed from Bummer's Flats were primarily located in an old gravel pit area located near the southern access to the property, and near a CPR crossing below the quonset hut. Weeds removed from the old gravel pit area were mostly hound's tongue and burdock. Some knapweed was also pulled in this area but the amounts were low. This area has previously been treated with herbicide to control the knapweed. Downslope of the quonset hut, a section of meadow clary was handpulled. This area was previously treated with herbicide and the few remaining plants were removed. At one of the road crossings over the CPR tracks into the wetland portion of the Bummer's Flats property, several weed species were observed along the tracks (figure ?), including Dalmatian toadflax, knapweed, hound's tongue, and baby's breath.

Other activities included erecting a short fence to prevent vehicle access to the kiosk, posting vehicle restriction/road closure signs, staining the kiosk, and cleaning up garbage and other debris (old tires, miscellaneous metal).

4.5 Cherry Creek Ranch

Person Days: 38

Tasks: Noxious weed control, redundant fence and debris removal, perimeter fence maintenance.

Burdock was the main weed removed from this property. A few spotted knapweed plants were also pulled. Several full compacted truckloads of burdock were removed from a dyke surrounding an old

pond and from an old fence line. This area was infested with wasp nests so some burdock was initially left due to safety concerns. This remaining burdock was removed in late October when most of the wasps were inactive.

During weed removal and perimeter fence assessments, several redundant internal barbwire fences were encountered and taken down. In total, approximately 3600 meters of old barbwire was removed. Large piles of old roofing metal, an old fridge, miscellaneous metal debris, and several old tires were also removed.

The perimeter fence was found to be in good condition along most of its length with one exception. Approximately 360 meters of the west fence was rebuilt (43 posts replaced), including the gate across the main access road. Additional work included cutting trees that had the potential to interfere with the fence in the future (mostly young fir), tightening wires, and replacing staples. Road closure signs were replaced at a gate on the west fence on the north side of Cherry Creek.

4.6 Whitetail Property

Person Days: 21

Tasks: Noxious weed control, perimeter fence maintenance.

Several noxious weeds were found in the lowest elevation field near the old red barn including spotted knapweed, hound's tongue, burdock, baby's breath, stickweed (blue burr), and Dalmatian toadflax. In this area, knapweed and hound's tongue were the most prevalent weeds but were not present in overwhelming amounts. Continued treatment of this property should eliminate the noxious weeds present. In another section of the property, adjacent to the old Tie Mill dam on the banks of the Bull River, a very large patch of burdock and hound's tongue was discovered. Two days were spent removing burdock from this site with little noticeable difference. This site will require a herbicide treatment or a week of handpulling.

Following noxious weed control, the perimeter fence was assessed and several posts were replaced with either wooden or metal T-bar posts. The T-bar posts were used where the ground was rocky and the existing wooden posts were too loose to support the fence. Other activities included splicing broken wires, retightening, and cutting trees from the fence line.

Two sections of the upper north fence that were in poor condition were not maintained. The first section runs across the middle of a steep side hill and poses an unnecessary barrier to wildlife moving upslope. Through consultation with the adjacent landowner, this section of fence may be relocated to the top of the hill to correct this problem. Insufficient time was available to correct the second section of fence. Most of the old posts in this section have rotted and some have collapsed.

4.7 Bar 40 Ranch

Person Days: 45

Tasks: Perimeter fence maintenance, removal of redundant internal fences.

No noxious weeds were observed on this property, but a small patch of knapweed was pulled earlier in the season from the Smith Road access by an adjacent landowner (Walter Kheler). This was the only known weed area on the Bar 40 Ranch.

The perimeter fence around this property is maintained by the Kheler family and was found to be in good condition. At one section of relatively new east perimeter fence near the start of Smith Road, several wires required tightening and splicing. The primary perimeter fence task completed by the crew was wiring wooden droppers and replacing broken/missing droppers. Approximately 500 new droppers were added to the fence and all existing droppers were wired. During the perimeter fence work, several internal barbwire fences were encountered and removed as time permitted. In total, approximately 9400 meters of barbwire were taken down and removed.

4.8 Strauss Property

Person Days: 6

Tasks: Construction of access barrier, illegal campsite cleanup, grass seeding.

Activities on the Strauss property focussed on an illegal campsite setup near the shores of Lake Koocanusa. A similar campsite is located across the access road on crownland. On the Strauss property, several fire pits were dismantled and a homemade outhouse was removed. Camping impacts included digging of fire pits, construction of tent pads, and leveling of the ground for trailers. The impacted area was grass seeded (seed provided by MWLAP).

People camping on the Strauss property may not have realized they were on private land, based on the lack of signage and the proximity of the crownland campsite. In an effort to prevent future camping, a rail fence was constructed across the main vehicle access point and “Private Property – No Camping” signs were posted.

4.9 Big Ranch and Musil Estate

Person Days: 44

Tasks: Rail fence construction, removal of old rail fence, gate replacement, barbwire removal, perimeter fence maintenance, debris removal.

The Big Ranch, including the Musil Estate, is located between Sparwood and Elkford on the Lower Elk Valley Road and it borders the Elk River to the east. With the exception of one small patch of stickweed (blue burr), no noxious weeds were observed on the Big Ranch property.

A new rail fence was constructed at the turnaround location near the quonset hut on Lower Elk Valley road to replace an old rail fence that was deteriorating. The old rail fence was dismantled and removed to the Sparwood Transfer Station. Three old wire and/or wood gates were replaced with new metal gates. Double gates were installed at each location and each gate was hung from 6 inch treated posts buried three feet in the ground. Each gate post was concreted in place and braced to a second 6 inch post also buried three feet. A local contractor (Derek Wilson) was hired to dig to the post holes with a Bobcat.

Following the gate installation, approximately 3000 meters of old barbwire were removed from the Elk River floodplain and from the north fence of the Musil Estate. The perimeter fence was tightened/spliced where required and several posts were replaced. At the south access into the Musil estate property, each of the fence wires had been purposely cut adjacent to the gate. Similar sections of cut wire were encountered along the west fence on Lower Elk Valley road and on the south fence along Travis Road. These sections were repaired and in two locations, pedestrian/horse gates were constructed (gaps in the fence wide enough for horses but not wide enough for vehicles).

Several truckloads of metal debris from the Musil Estate were removed to the Elkford Transfer Station and several tires were dropped off at the Jaffray Transfer Station (to avoid charges (\$156.00) associated with dropping off tires at the Elkford and Sparwood Transfer Stations).

4.10 Columbia Valley Wetlands

Person Days: 6

Tasks: Installation of perimeter fence extension, perimeter fence maintenance.

The main tasks completed on this CWS property were the construction of a fence extension along the south fence to prevent cattle access, and repair/maintenance of the perimeter fence. The fence extension was constructed on a steep sandy slope with four metal T-bar posts and barbwire. The ground was steep enough (approximately 70% slope) that cattle should not be able to get around this fence. Much of the south fence was down so the wires in this section were reattached. Most of the west and north fence were in excellent condition. In one section, the four wires appeared to have been purposely cut. These wires were spliced. Other tasks included removing trees from the fence line and replacing broken wooden droppers.

5.0 ADDITIONAL FUTURE WORK

At most properties, only the highest priority activities were completed as time permitted. As a result, most properties have additional work to be completed. Other MWLAP, TNT, CWS, and CBFWCP properties that could not be visited may also require maintenance that could be completed by a youth crew. These agencies should be consulted prior to a future projects to determine their needs.

5.1 Wasa and Cameron Sloughs

The spotted knapweed infestation of these properties was severe. In particular, the dyke along Cameron Slough was so infested that we did not attempt to remove it. During low water, herbicide treatment of these properties should be considered to help eradicate knapweed and stop its spread to adjacent private lands. Further hand-pulling of areas where herbicide use would not be considered appropriate (e.g. adjacent to waterbodies) should be continued. Feedback from the local community while we were pulling weeds here was positive and people were encouraged to see weed control activities occurring. However, most people would like to see a more aggressive approach to knapweed control on these properties.

5.2 Wolf Creek

Hand-pulling of weeds should continue on this property as the amounts present were generally low and manageable. Approximately 900 meters of the west fence needs to be rebuilt after a forest fire destroyed it. It may be possible to access part of this fence line with a machine equipped with a hydraulic post-pounder, but some sections may require hand pounding. The east and south fences should also be checked and repaired as required. Most of this fence was in good condition but some wire repair and post replacement may be required. Time constraints prevented these tasks from being completed during this project.

5.3 Cherry Creek Ranch

Burdock removal should continue in the areas pulled during this project (section 4.5). The extent of knapweed infestation was not known as the field where they were present was tilled. If they were present in large numbers but in a relatively small area, manual control may be sufficient, otherwise a herbicide application should be considered to reduce the risk of further spread.

One of the tasks not completed this year was installing toprails along certain sections of fence. Appropriate sections should be identified and top-railed as appropriate. It is anticipated that top-rails will be installed at and adjacent to major game trail crossings. An assessment of the perimeter fence should also be made to see if changes have occurred that require maintenance. With the exception of top rails, much of the perimeter fence was in good condition or had been repaired this year.

5.4 Whitetail Property

Hand-pulling of weeds from the lower field (with the red barn) should continue and should be sufficient to control the various noxious weeds present due to their relatively low abundance. The large burdock and hound's tongue patch near the old Tie Mill dam should be treated more aggressively with a herbicide. Hand-pulling of this patch would take considerable time and because of limited access, could lead to further spread of seed as the weed must be packed through the forest to the vehicle (bagging these plants is not practical due to their large size).

If the north fence on the side hill is to be moved upslope to flat ground (section 4.6), the new fence construction could be completed by a future youth crew. Additionally, the old and failing section of the north fence could also be rebuilt by a future crew.

5.5 Bar 40 Ranch

Two main tasks remain on the Bar 40 Ranch. The first is the continued removal of redundant internal barbwire fences. Almost 10 kilometers of barbwire were removed this year but several more fences are still standing. The second task is the realignment and construction of a section of the north fence. The fence is currently not on the property line and is in relatively poor condition.

5.6 Big Ranch and Musil Estate

Several tasks remain on these properties. The first is reconstruction of the south fence along Travis Road (approximately 500 meters of fence). The current fence is old and is failing in some sections. Parts of the current fence are attached to trees, a situation that should be corrected. New metal gates could be installed at the two access roads into the Musil Estate. Finally, the several old and mostly mangled car bodies on the Musil Estate should be removed. This will require considerable effort and a contractor with a tractor and a flatbed truck should be considered to remove these vehicles.

6.0 BUDGET SUMMARY

The total project budget was \$47,120.00. The following table summarizes the various costs.

Table 3. Project budget and cost summary for the East Kootenay Youth Crew.

HCTF Contribution	\$37,620.00	
CBFWCP Contribution	\$9,500.00	
Total Budget	\$47,120.00	
TNT Administration (10%)	$\$47,120.00 \times 10\%$	\$4,712.00
Wages		
Crew Supervisor	575 hours x \$20/hour	\$11,500.00
Crew Members	1321 hours x \$10/hour	\$13,210.00
4% Holiday Pay	\$24,710.00 x 4%	\$988.40
Subtotal		\$25,698.40
Vehicle Rental		
Rental & Insurance	\$1899.00 x 3 months	\$5,697.00
Fuel (est.)		\$1,000.00
Repair		\$530.00
Subtotal		\$7,227.00
Accommodation and LOA		
Motel	estimated	\$900.00
Living Out Allowance (LOA)	7 days x \$200/day	\$1,400.00
Subtotal		\$2,300.00
Tools and Supplies	estimated	\$2,000.00
Estimated Project Cost		\$41,937.40

7.0 RECOMMENDATIONS

This program should continue in the east Kootenay as it was well received by adjacent landowners and all the activities completed improved conditions for wildlife. Although the entire budget was not used, a similar budget should be provided for future years. Cost savings were realized this year by using posts, gates, and other materials that were present at some of the properties. In future years, these materials will have to be purchased.

Project funding should be in place in early spring to allow for crew hiring in April. Hiring early would attract students interested in wildlife enhancement and conservation and hiring students may provide subsidies (through various government initiatives) that would allow additional crew to be hired or allow a smaller crew to work for a longer period. Ideally, the project would work from early May to August (12 weeks), with a crew consisting of a supervisor and three or four crewmembers. TNT and MWLAP properties not visited during 2002 should be inspected to determine if there is potential youth crew work at these sites.

APPENDIX I

Photodocumentation of Crew Activities