Final Report BLESS Summer Nature Centre REEP Pilot Initiative

Sarah Pearson August 25th, 2005

INTRODUCTION

It has been a successful season for both the BLESS Summer Nature Centre and the River Edge Enhancement Project (REEP) of the Sturgeon River. In this final report, I present information on Nature Centre operations, programming, publicity, impact, recommendations, documenting photographs and a floor plan. For REEP a brief overview, contributions and recommendations are also covered.

OPERATIONS

The Nature Centre saw a considerable number of visitors from June 14th to the opening day when much preparation work was being completed. The centre officially opened June 25th and operated Tuesday through Saturday from 11:00 a.m. to 4:00 p.m. and remained open until August 27th. Dan Stoker wrapped up the season by taking over operations on August 23rd. Hours of operation were 6.5 hours per day, 5 days a week. The initial plan was to have 10:00 - 11:00 a.m. and 4:00 - 4:30 p.m. as open windows for preparation time and contribute to REEP.

As a number of early visitor comments mentioned that some of the games were repeats of last year's, I developed and offered almost double (approximately 15 activities and displays per week) that was offered in 2004 according to visitors and logbook recordings. Developing and implementing programming, while contributing to the inventory for REEP posed a challenge, given the allotted work hours. I manned the centre during operating hours to interact with visitors and meet the demands of running the Young Naturalist Program. I ended up volunteering much of my time in the mornings and evenings.

Contributing to REEP was minimal due to time allowance, as my primary responsibility was running successful programming at the Nature Centre. Working along side the leader in the project's pilot year, Dan Stoker, a BLESS Board Member was a valuable experience. His contributions and mastery was invaluable. I was involved in the vegetation inventory, report preparation, and meetings with city employees. I managed to:

- round up tested and true riparian data collection methods fitting to the project;
- make additions to report's glossary of terms;
- carry out inventory and mapping duties; review protocol with and receive feedback from a riparian specialist;
- provide riparian fact sheets (compliments of Cows and Fish) to the public;
- provide feedback on the final draft of the report.

With the city I:

- tested mapping programs;
- sat in on meetings to discuss various developments and set agenda;
- made additions to Parks Master Glossary of Terms;
- overviewed inventory complete with protocol with parks foreman and crew;
- secured use of the engineering department's specialized printer and laminator for a final poster spread of the report.

Given that the project was in its pilot year, the extent of time and effort in planning protocols including methodologies, and classifications before following through, was unclear. Some approaches and strategies I brought to the table were thought to being constructive, and were employed. A lot of work was put into collecting and interpreting baseline data that was later put into a report layout, for city officials and council. BLESS' past and future work can contribute to a management plan or a state of the environment report developed and utilized by the city in various remedial projects.

NATURE CENTRE PROGRAMMING

There were approximately 1766 visitors (1569, 2004) (excluding June 21^{st} ; August $23^{rd} - 27^{th}$) to the nature centre. As in years past, a daily logbook was kept complete with a tally of visitors and necessary tasks. Verbal comments along with those in the guest book (used for a second year) were our main lines for getting feedback, and to ultimately assess what visitors enjoyed.

Similar to last year, the center offered drop-in programming as well as the Young Naturalist programming (see Appendix for Young Naturalist Program details). A total of 105 (48, 2004) children enrolled in the Young Naturalist Program, more than double in years past. Of that, 36 graduated (24, 2004) and 28 were nearing completion as of August 20th. I incorporated easy, intermediate and challenging interactive displays, games, and crafts related to the week's theme appealing to a wide age range from tiny tots to senior. Those enrolled in the Young Naturalist training were ideally in grades 2 – 5 and would commit to completing the program requirement. Once completed, the Young Naturalist received a certificate and Dairy Queen voucher.

In addition to daily sticker give-a-ways, weekly prize draws were made. The 'Prize Den' was filled with a variety of prizes topped with a sign, and jug acting as the ballot box. A prize ballot form (cut recipe card) could be filled out (first name and phone number) once the participant completed an activity. As a general rule, one ballot per visit was set to conserve resources. I drew an average of 12 names a week; 10 of those were for smaller prize packs comprised of a workbook with a pencil, bookmark or sticker. The 2 remaining were grand prize winners who were notified by phone, and were given the choice of an additional prize to their 'smaller pack' (i.e. poster, glow in the dark ceiling stickers, experiment in a bottle, butterfly nets, plastic bugs, bug bottles). Dollar stores proved to be an excellent source for prizes.

RESULTS

The centre was open for a total of 41 days with 1766 visitors compared to when in 2004; the centre was open for 43 days with1569 visitors (Table 1-1) during my term at the centre. The total number of visitors to the centre including Neil M. Ross Elementary school's year end party (Table 1-2) was 1842. Nature Centre visitors were from a variety of ages, and the majority resided in St. Albert. These included day care and special need groups. Out-of-towners were visiting family and friends and holidaying.

Of the 1766 visitors, 1038 (59%) were children and 729 (41%) were adults (Figure 1-1 in Appendix; Table 1-3). During their summer holidays, children frequented the centre consistently - not following a weekly agenda as adults do. Adult visitors were on the increase as days approached the weekend and reached its apex on Saturdays. The visitors on Saturdays consisted mainly of people passing by. A number of adults were curious about the Nature Centre and had questions about BLESS, wildlife questions etc. Most children participating were accompanied by their parents or grandparents. Others came with aunts and uncles, babysitters / nannies, a few friends, or on their own. This explains the patterns in the rise in visitors nearing the weekend for the busiest rankings for 'kids', 'adults' and 'both' categories. (Figure 1-2 in Appendix; Tables 1-4 to 1-6)

Similar to last year, weekdays saw more regulars who spent a greater amount of time visiting then on Saturday. Our slowest days were those rare ones where we had rain and cooler temperatures, or when special events like the Grande Prix and Klondike Days may of had an affect. The daily average of total visitors was 42 (39, 2004); 26 were kids (22, 2004); 18 were adults (14, 2004) (Figure 1-2 in Appendix; Tables 1-4). There was no real distinct busy time of the day at the nature centre this summer. Visitor

tallies included those few whose main interest was the free drinking water. The only real observable trends include that: the centre occasionally had an influx of visitors during the first hour of opening, visitors dropped during noon hour, and increased shortly after. On occasion, the centre opened early, or closed late due to a high number of visitors or keen individuals visiting. Visitors would often offer to help me pack up activities at the end of the day.

ADVERTISING

Prior to opening the centre, Dan and I hosted a year end party for three grade three classes from Neil M. Ross (Table 1-2). Activities took place outdoors where teachers and guardians led groups to complete various centers. Hosting this party of 60 children within the target demographic is believed to have kick-started 2005 at the centre. The St. Albert Gazette followed this event with an article (on west wall of centre, see bulletin board) on the center's offerings over the summer, along with a write-up on the event and a shot of Dan instructing the students. Dan followed this by visiting schools in the surrounding area to brief teachers and classes on the centre.

In addition to creating signs for the centre outlining hours of operation, programs and weekly offerings, I wrote and submitted monthly ads to be included in the St. Albert Community Calendar; Economic Development & Tourism, City of St. Albert. On Community boards in St. Albert, I hung posters at the following sites: Musee Heritage, St. Albert Community Hall, Chapters Bookstore, and St. Albert Centre. Following Dan's ad outlining the center's opening date and offerings to the St. Albert Gazette and to members of BLESS, I made weekly submissions to the *What's On* calendar section of the Gazette's paper and website listings to advertise centre offerings and changing themes. Large sandwich board signs and posters indicating that the centre was open were used daily for the second year to draw more visitors.

On four occasions, photographers from The St. Albert Gazette shot the centre for pieces in the weekly paper. Near the end of my term, the St. Albert Gazette heard about the center's successful season through word of mouth, and completed another article (on west wall of centre, see bulletin board).

IMPACT

The BLESS' Summer Nature Centre is a valuable outlet for building environmental awareness. Over the course of the summer, the nature center had a total of 1766 visitors. Individuals were directly and indirectly affected by BLESS' Summer Nature Centre. Indirectly, by walking or driving, simply noticing signage and/or activity at the centre, or stopping for a drink of water or to ask for directions; directly, by taking part or supervising kids engaged in activity, and / or by asking questions.

Fun and educational activities and displays taught about local, and provincial flora and fauna and environmental issues. The ultimate impact would be to spark desire to act upon the participant's respect and knowledge, by practicing environmental stewardship. I am certain that involvement overcame fears, developed appreciation for and /or an awareness of the natural world, and perhaps impacted their morals, values and ethical beliefs.

On occasion, activities and displays would inspire individuals to seek out, experience and learn on their own (i.e. raising tadpoles, catching and observing water creatures, and volunteering their services to the oil spill clean-up at Wabamun Lake). In addition to the activities in and around the centre, children often times accompanied me to the river to collect, observe and learn about aquatic invertebrates and their habitat. Others returned to the nature centre with stories and questions about their wildlife encounters from holidaying, or their visits to Big Lake and Lacombe Lake. A number of returning

visitors would enthusiastically recite tidbits of information they heard, or learned through a game or activity from a past visit or would elaborate on things they learned.

All feedback reinforced the positive work that was being done at the Nature Centre. In addition to those in the guestbook, verbal comments ranged from the variety of programming being offered, to the ability to run the centre using a single employee. Questions and concerns often turned into inspiring conversation about natural history and biota of the area, or inquiries into how to become a member of BLESS. Some became members of BLESS, came bearing donations to BLESS.

CONTRIBUTIONS

The BLESS Board of Directors were all very welcoming. Dave Burkhart; President, and Dan Stoker; Board Member, were especially warm and advised me on Nature Centre operations; as well as REEP. Their involvement and concern in having a successful season at the centre was greatly appreciated. Thank you for this experience.

I merit the following individuals for their assistance with REEP: Roger Belley, Community Parks Coordinator; Kevin Veenstra, Red Willow Park Foreman; Alyson, GIS Technician; Steve Drapala, Larvae Exterminating Specialist.

From Saturday, July 15th, Michelle Riopel volunteered every week until August 20th for about 2.5 hour periods. She kindly contributed a total of 13.5 hours. Besides instructing children, she completed odd jobs like touching up signs, sharpening pencil crayons, putting together activities, and researching craft ideas. I appreciated her pleasant demeanor, time and effort.

RECOMMENDATIONS

Nature Centre-

To be completed by the City of St. Albert:

- Paint parking lot stalls
- Fill hole in lawn 'primary games area' (east of centre approximately 4-5 m)
- Prune shrubs

Nature Centre Operations:

- Count and record number of prize draw entries throughout summer
- Advertise at Lion's Park Canada Day festivities, Teddy Bear's Picnic etc. with sandwich board sign (i.e. who we are, what we offer, just down the bike trail, photo of center)
- Have two people manning the Nature Centre. One operating centre, and the other taking groups on nature excursions for example: scavenger hunts or nature exploration walks
- Organize a few birding get-togethers through out the summer. Half- a- dozen inquiries about birding groups in St. Albert
- Run end of school year parties or field trip sessions with classes studying local flora and fauna as a source of income for BLESS, publicity for Summer Nature Centre

Nature Centre Maintenance:

• Mouse traps – I have noticed a few mouse droppings throughout the summer. I have periodically cleaned storage areas etc and set mouse traps – have caught one. Might not be a bad idea to set a couple upon closing for the evening and at night on the final day of the 27th

- White paint applied to tables
- **New signage** outside: large hanging yellow tarps with black writing 'SUMMER NATURE CENTRE' to replace white ones; or replace white 'OPEN' with yellow ones with black block lettering

Nature Centre Resources:

- **Buy** *Bugs of Alberta* and *Plants of the Boreal and Aspen Parkland* guidebooks for centre resources. These additions would complement the current collection of **guidebooks**
- **Ozonal ointment** added to first aid kit to soothe wasp bites in August; wasp trap
- Money for prizes upgrade quality to guide books or more substantial value
- WHIMIS binder

Young Naturalist Program:

• Lowering number of required activities to complete the program, last year 6 to complete in 3 weeks to see more completing the program.

Potential Activities:

- Adjective Bingo divide a board into sections and write an adjective (i.e. blue, dead, hard, crispy, spotted, dry, bumpy, crunchy, lined, thin, smooth, tiny, brown, thick, soft) Call out objects like they are letter and number combos; or have them find or list things matching descriptions in nature
- Sensing Your Environment ... Potential Theme: Squirrels Preparing to Hibernate -Make objective(s) clear to the participant; have them take note of where they are, and what direction they are facing.

-Blindfold on. Hand them a small object 'food stash' for them to carry.

-You will lead them along a course and to take note of how many steps forward, left, right, around a tree they go and so on (keep track of their progress) because they will need to re-trace their steps to locate their 'food stash' once you return them to the starting station.

- Touch, Feel and Guess Board
- Additional Activities for Senses Theme:

-Smell: blindfold on, smell and id pine, sage, flower ...

-Senses and Survival Wildfile: Signals for being poisonous to predators; camouflage; attractants; antenna; sound signals (beaver flapping tail - danger); bird migration; alertness (deer); adaptations (i.e., larger ears; huge number of eye lenses, super sense of smell for snakes)

- Origami flowers
- New interactive posters
- **Beak Game** mimic beak styles of local birds using everyday items to pickup food source (i.e. Heron (painted wooden pegs) fish (painted clothes pins); Duck vegetation; Osprey fish; Avocet (chopsticks) insects (plastic insects))
- Make clay eggs and paint to complete nest displays
- Raise predacious diving beetles
- Poster of days activities indoors and outdoors

REEP-

• If not hiring an additional summer employee next season, **lessen time constraint by i.e. cutting** the young naturalist program, activity creation or number of activities offered if funding allows

APPENDIX

Activity Instructions-

• **Bat Simulator Game – outdoors** Form a sting into a banana / tunnel-like shape mimicking an entrance to a cave with the starting end being open.

Two versions:

1.) Dan's: (one player required plus instructor) blindfold player (bat), tap an object or have your voice reach greater pitch and frequency (louder and quicker as the bat finds its way to the cave's end. The 'beacon' follows them along their path also acting as a barrier or boundary.

(Multiple players – have >1 beacon: line the outside of the course with them

2.) Sarah's: Have the object of the game for the blindfolded 'bat' to catch its food supply 'moths'. Have the moths located in the cave with the bat. The moths must call out moth three times for every ______ number of steps, or seconds. Once the bat tags a moth (or a certain number of moths) they win and trade positions. *May have to down-size the course. Integrate a life aspect?*

• Bird Watching – outdoors

Erect signs of birds (species appropriate to theme, or set a variety: back yard, raptors, forest dwellers, water dwellers) Use hula-hoop for participant's vantage point using the binoculars. Marked guide book indicating illustrated species. Participant must I.D. the birds to species as best they can use their knowledge, clues, and guidebook. Game evolved often into an actual birding exercise.

• Touch and Feel - Associated objects with Birds

Similar to Senses' week Touch and Feel activity. Use items associated to birds (i.e. feather, branch, nut, chick, flower...)

Figures 1-1; 1-2- See attached

Floor Plan- See attached

Young Naturalist Program – see attached

Personal Items Used or Borrowed-

- Desk lamp
- Toilet paper rolls (x2)
- Lever 2000 soap (x1)
- Posters
- Books
- Feathers for flying bird craft and display
- Photos of wildlife encounters
- Food colouring
- Bean seeds
- Spray bottle
- Paper rolls
- H20 droppers
- Magazines (i.e. Chickadee, Big Backyard, Owl)
- Posters
- Bugs of Alberta; Author: John Acorn
- Bug bottles
- Plants of the Western Boreal Forest and Aspen Parkland; Author: Derek Johnson
- Newspaper articles
- Fan
- Cell phone

• Radio

Photographs- See disc

Activities per Week and / or Theme-**Reference sleeve numbers to BLUE 2005 Activity Binder** * indicates popular ** indicates popular and a favorite July $25^{\text{th}} - 2^{\text{nd}}$ July 5th – 9th Your Senses in Nature $July 12^{th} - 16^{th}$ **Backvard Birds** July $19^{th} - 23^{rd}$ **Discovering Bugs n' Butterflies** July $26^{th} - 30^{th}$ **Tremendous Trees and Plants** August $2^{nd} - 6^{th}$ Water Creatures: Big and Small August $9^{th} - 15th$ Wonderful Wetlands and Water Birds August 16th - 20th **Marvelous Mammals**

• June 25th – July 2nd

**Aquariums with crayfish, aquatic invertebrates
**Pond Dipping – aquatic invertebrates
Interactive Posters
**Bean Bag Toss
Word Unscramble Game
Colour a Blue Jay/Dragon Fly
What is Canada to you drawing / AB. Centennial colouring sheets; SLEEVE 2
**Origami Frog Craft; SLEEVE 14
**Animal Part Match-Up – SIGNAGE IN POSTER STORAGE IN CENTRE
Detective 'Wildfiles' – Bird research; SLEEVE 7; SIGNAGE IN POSTER STORAGE IN CENTRE
Pizza box spp
Fit-the Facts
*Fit Animals to Habitats
Bird Migration Game 1 – marble course
*H20 Critter Drawings; SLEEVE 17

• July 5th – 9th Your Senses in Nature

**Aquariums with crayfish, aquatic invertebrates
Interactive Posters
**Bean Bag Toss
**Pond Dipping – aquatic invertebrates
*Explore Senses in Nature – outdoors; SLEEVE 2
**Bat Simulator Games – SEE APPENDIX
Word Unscramble
*Memory Game
*Fit Animals to Habitats
*Super Senses Matching; SLEEVE 3
Explore Your Senses in Nature Match-Up – indoors; SLEEVE 3
**Touch and Feel Match-Up – SIGNAGE IN POSTER STORAGE IN CENTRE
**Vegetation Rubbings and Drawings; SLEEVE 1

• July 12th – 16th Backyard Birds

**Aquariums with crayfish, aquatic invertebrates **Tadpoles on display; SLEEVE 14 **Pond Dipping – aquatic invertebrates
Interactive Bird Poster
**Bean Bag Toss
Bird Picture ID (outside)
*Bird watching exercise – SEE APPENDIX
**Robin's nest and eggs display– SIGNAGE IN POSTER STORAGE IN CENTRE
**Did You Know -Owl wing, feathers, bones display – SLEEVE 7
*Colour a Hummingbird / Blue Jay; SLEEVE 5
*Birds of Prey Match-Up; SLEEVE 4
*Memory Game
*Migration Game 1 – marble course
**Flying Bird Craft; SLEEVE 6; EXTRAS IN BACK OF BINDER; PHOTO
*Feeding Birds Poster; Q and A sheets; SLEEVE 6
*Touch and Feel - bird associated objects – SEE APPENDIX

• July 19th – 23rd Discovering Bugs n' Butterflies

**Aquariums with crayfish, aquatic invertebrates **Tadpoles on display; SLEEVE 14 *Pond Dipping – aquatic invertebrates Interactive posters **Bug Blitz catch, observe and ID; SIGNAGE IN POSTER STORAGE IN CENTRE + BIN OF Q'S + NEEDED MATERIALS *Bug Blitz puzzle and id match-up game; SLEEVE 8 *Memory – 'brainy bugs' *Detective-Pizza box spp game **Butterfly metamorphosis craft coupled with lifecycle poster; SLEEVE 9; POSTER AND SOME SUPPLIES IN CENTRE'S STORAGE: *Ant colony interactive poster (borrowed) *Yellow Jacket Wasp Display and game *Seek and Find in clover patch game; SLEEVE 9 **Dragonfly, earthworm, butterfly and moth differences displays with spp; SLEEVE 9 *Colour a critter *Wetland plant draw/story activity; SLEEVE 12

• July 26th – 30th Tremendous Trees and Plants

**Aquariums with crayfish, aquatic invertebrates, frogs; SLEEVE 14
**Did you know about 2 trees hunt; SLEEVE 12
Plant Unscramble; SLEEVE 11
**Bean bag toss
**Pond Dipping – aquatic invertebrates
Tree Uses poster (borrowed)
Interactive posters
*Trees of AB poster and ID; SLEEVE 12; POSTER IN BACK ON BINDER
**Activity and colouring pages x3; SLEEVE 10
*Wetland plant draw/story activity; SLEEVE 12
*Unusual plants match-up
*Plant part picture and function match-up; SLEEVE 13
**Greenhouse in a bag craft; SLEEVE 10; PHOTOS
**Tree stump and info sheet about parts and functions; Happy Birthday to Tree activity; SLEEVE 11
*Did you know display; SLEEVE 11

• <u>August 2nd – 6th</u> Water Creatures: Big and Small

**Pond Dipping – aquatic invertebrates
Interactive posters
**Bean Bag Toss
**Aquariums with crayfish, aquatic invertebrates, frogs; SLEEVE 14
**Reptiles and Amphibians Match-up game; SLEEVE 16
*Did you know? About fish, reptiles, amphibians, H20 invertebrates; SLEEVE 15
*Colour a scene; SLEEVE 13
Who eats who game (food chain); SLEEVE 16
*H20 Critter Drawings; SLEEVE 17
**Frog Origami; SLEEVE 14
*Water strider activity; SLEEVE 17

• August 9th – 15th Wonderful Wetlands and Water Birds

**Aquariums with crayfish, aquatic invertebrates, frogs; SLEEVE 14 **Pond Dipping – aquatic invertebrates **Bean bag toss *Water bird watching **Migration game 2 – golf / tennis migration game **Colour a Heron, coupled with Hungry Heron game; SLEEVE 19 *For the Birds Match-up; SLEEVE 21 **Marsh of Life food web food chain game, SLEEVE 17 Lakeside birds – match-up; SLEEVE 18 *Word search 'bog browse'; SLEEVE 18 Wetlands poster, for the birds – hide and seek; SLEEVE 20 *Wetland losses and functions display; SLEEVE 20 *Oil spill articles; SLEEVE 21 **Once Upon a time...plant uses display; SLEEVE 21 *Memory Fit-the Facts

• August 16th - 20th Marvelous Mammals

**Aquariums with crayfish, aquatic invertebrates
*Pond Dipping – aquatic invertebrates
**Bean bag toss
**Which animal 'game show'
*Bat Simulator – see appendix
**Animal Part Match-Up; SLEEVE 21 – SIGNAGE IN POSTER STORAGE IN CENTRE
*Omni/Carni/Herbi puzzles and Match-up – PARTS IN ACTIVITES MADE PRIOR
*Chipmunk Checkers – hibernation lesson; SLEEVE 22
**Moose door hanger craft coupled with interactive moose poster; SLEEVE 22
*Fit Animals to Habitats
*Hibernation, nocturnal mammals, endangered spp displays; SLEEVE
**Beavers display; SLEEVE 21
*Once Upon a time...plant uses display; SLEEVE 21