



**Congratulations to the City of Swift Current on building the wastewater treatment plant**



The SCCWS had another successful year with the SCC Monitoring Project and we are now another step closer to a better understanding of the Health of the Watershed. Water, fish and macroinvertebrate (bug) samples were taken in various locations in the Swift Current Creek.

These locations were chosen for their:

- Representation of the diverse geography in our watershed
- Accessibility

When the locations were chosen the next three steps were:

- Stream flow measurements.
- Fish collection using two techniques:
  - Seine net (large net that goes from one shore to the other)
  - Electro shocker (itschucking a small shock into the water to temporarily stun the fish)
- Macroinvertebrate Collection using a kick net

The SCCWS have one more year of data collection in this 4 Year Project and then in 2007 we will begin to answer the question...

**Is the Swift Current Creek Watershed Healthy?**

When we have a better understanding of the Health of the Watershed we will be better equipped to focus on areas that may need attention.



## OUR GOALS

Contact the  
SCCWS

@  
778-5007

or

www.sccws.com

**E**ducate users of the Swift Current Creek Watershed on a continuous basis, about issues and impacts which affect water quality.



**E**ncourage an attitude of individual responsibility toward watershed stewardship.

**M**onitor water quality and riparian health to assist in co-operative solutions regarding water management issues.

### MISSION STATEMENT

Enhance water quality and stream health of the Swift Current Creek Watershed by promoting awareness and understanding among water uses

# FROG HOPPERS



To book a Frog Hoppers Workshop call 778-5007 or go to [www.sccws.com](http://www.sccws.com)

Frog Hoppers is an educational program used to deliver workshops that are designed for students age 8 - 14 and can be given either at the creek or in the classroom.

Workshops look at such things as:

- ~ Geography of the Swift Current Creek
- ~ Riparian Areas (what are they and what is their purpose)
- ~ Hands-on nitrate and PH tests
- ~ Animal, fish and water bug habitat using preserved samples

Students will be able to answer the question...

**Why is the creek important to me?**



**How much water do you need to...**

- Use the dishwasher?
- Take a shower or bath?
- Brush your teeth?
- Wash the car?
- Flush the toilet?
- Run the clothes washer?

A liter of water weighs 1.01 kilograms or 2.2 pounds

Water freezes at 0 degrees Celsius

Frozen water is 9% lighter than water, which is why ice floats on water

Water vaporizes at 100 degrees Celsius

Each day, almost 10,000 children under the age of 5 in Third World countries die as a result of illness contracted by the use of impure water

**Quiz ANSWERS**

- . . . . .7-5 gallons
- . . . . .17-24 gallons
- . . . . .2-5 gallons
- . . . . .35-50 gallons
- . . . . .2-7 gallons
- . . . . .50 gallons

Q: Give me food, and I will live; give me water, and I will die. What am I?  
A: Fire



# HAVE YOU SEEN THESE PLANTS?

## PURPLE LOOSESTRIFE



You may know it by the name **LYTHRUM** and it is on the **Noxious Weeds List of Saskatchewan**. Purple Loosestrife is a very aggressive invader. One purple loosestrife plant can produce over 2 million seeds. Both seeds and seedlings float, so spread is rapid in moving water such as the creek. Seedling establishment requires open moist soil or organic debris and often occurs on bare shores exposed by dropping water levels. It has low palatability to vertebrate herbivores (plant eating animals such as deer, cattle, and sheep) so stands support little wildlife. No herbicides are registered for use against purple loosestrife in Canadian aquatic habitats and plants regenerate readily after mowing. The only way to eradicate it is to pull it out by the roots and burn the plants. This must be done by midsummer before the plant goes to seed.

## OR DAME'S ROCKET



There are now over 105 sites of escaped Purple Loosestrife in the province of Saskatchewan.



Purple Loosestrife often do not spread in your garden because their seeds require moist conditions for germination.

**Dame's Rocket (*Hesperis matronalis*)** is native to Europe and Asia and is a member of the brassica family.

- It is a hardy plant that tolerates a wide range of soil conditions.
- Its prolific self-seed enables it to spread.
- It can dominate moist areas of meadow, forest edges and riparian woods and (exotic) native plants.
- Many of the suspected Purple Loosestrife sites that were identified in the Saskatchewan Purple Loosestrife Habitat were actually Dame's Rocket; for example, many sites have been reported along Swift Current Creek.
- Many loosestrife grow Dame's Rocket and it seems to be a favorite in many "wildflower" seed mixes.
- Because of its invasive nature, so much care has to be given with Dame's Rocket as Purple Loosestrife.

## You may find them in your RIPARIAN ZONE

Whether it's a creek or a lake, the strip of trees, shrubs, and grasses that naturally grows along a shoreline are important for fish habitat. This is the riparian zone and it acts as a buffer between land and water.



## or in your FLOWERBED



Originally many garden varieties of purple loosestrife such as Morden Pink, Morden Gleam or Dropmore Purple were considered to be sterile (did not produce seed), safe horticultural cultivars. Recent scientific studies have shown that these varieties are indeed capable of pollen and seed production. These plants can readily cross pollinate with other garden varieties, as well as wild loosestrife populations. In a Manitoba study, Morden Pink cultivars were planted near a wetland with purple loosestrife and six months later all Morden Pink plants produced viable seed. The majority of wild infestations of purple loosestrife are the result of garden escapes.

### DO YOU HAVE PURPLE LOOSESTRIFE (LYTHRUM) IN YOUR GARDEN? EXCHANGE IT WITH THE SWAP PROGRAM!

It's as easy as this:

- Dig up your purple loosestrife plants, double-bag them, bring them to a participating greenhouse and you will receive an alternative 3" or 4" perennial. Any Purple Loosestrife that is brought in, regardless of how small (as long as it is an entire plant, including stem, leaves and root mass) will receive one perennial. For people with excessive purple loosestrife to drop off, you will receive one 3" or 4" perennial for every 2 FULL black standard garbage bags.

PARTICIPATING GREENHOUSE  
Gulf Lake Greenhouse  
873-4123



Many of the sightings of both Purple Loosestrife and Dame's Rocket are along this creek by storm sewer outlets. This strongly suggests they are coming from garden plants when the city, when the seeds are washed down the storm sewer system.

### Environmental Impacts

#### Purple Loosestrife & Dame's Rocket

- replaces native wetland communities
- eliminates food and shelter for wildlife species
- reduces biodiversity
- impacts fish spawning habitats
- reduces available waterfowl habitats
- threatens prairie porcupine habitat where a large portion of North America's waterfowl breed
- impacts recreational uses of wetlands
- impedes water flow in drainage and irrigation ditches

Check out  
*The Saskatchewan Purple Loosestrife & Dame's Rocket Species Project*  
website at  
<http://www.sh.saskatoon.sk.ca/science/loosestrife/>  
or call  
(306) 975-4101



### DISPOSAL OF NON-DOMESTIC PLANTS (Not eligible for the SWAP Program)

- The entire plant must be removed to minimize the chance for re-growth. Dig out the root mass, making sure you have removed ALL pieces. The roots extend 30 cm (1foot) or deeper into the soil.
- Place ALL plant matter in double garbage bags, so it isn't in danger of being spread by wind, water, human or animal activity.
- The garbage bags must be left out in the sun for a couple weeks, so the vegetation will rot. After this time the purple loosestrife can safely be picked up by your regular garbage disposal and taken to the land fill.

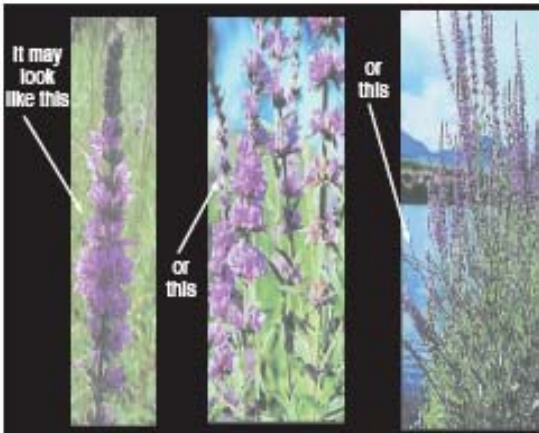
Purple Loosestrife blooms from June to September on long, pink/purple spikes.

If left unchecked Purple Loosestrife will spread rapidly choking out native vegetation.

Purple Loosestrife has a square woody stem and opposite leaves.

Wildflower mixes often include Purple Loosestrife & Dame's Rocket.  
Check the label of the seed package before planting this mix.

Purple loosestrife can easily re-establish from small pieces of root, stalk or seeds.  
After digging it out make certain that no trace of the plant remains in the soil.  
Frequently re-inspect the area for new shoots that may grow.



It may look like this

or this

or this

Minister and Deputy Minister  
Saskatchewan  

 Minister of the Environment  
Saskatchewan

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