Swift Current Creek Watershed Stewards

Know Your Watershed

Volume 5 - Issue #1 | Know Your Watershed | Fall 2008

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Agriculture Producers Improving Creek Health!

The Swift Current Creek Agri-Environmental Group Plan (AEGP) began in 2006 and was completed in the summer of 2008. It began as an initiative funded under the Canada-Saskatchewan Agriculture Policy Framework Agreement. It was a complementary program to the Environmental Farm Plan (EFP), which allowed producers to access funding to address an environmental issue of local concern – in this case, water quality! Landowners within the watershed were eligible to receive 50% cost recovery to develop projects that would improve water quality on the Swift Current Creek, Rush Lake Creek, or their tributaries.

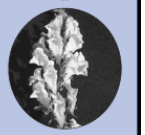
The Beneficial Management Practices (BMP's) eligible for funding included Relocation of Livestock Confinement and Horticulture Facilities, Wintering Site Management and Riparian Area Management.

Through these, producers could apply for cost-shared money for fencing, livestock watering systems, portable shelters, forage seed, etc. Producers really care! Over the 2 year span of the program, 53 different producers submitted 102 project applications!

What are YOU doing to protect the water in our watershed?

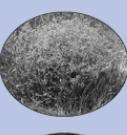
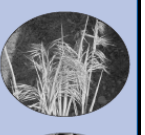
Many invasive plants are escapees from gardens. Can you match these invasive plants to their names?


Yellow toadflax

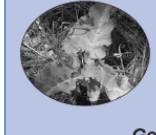



Crested wheatgrass

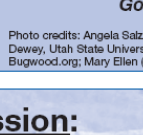
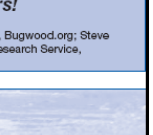

Baby's breath

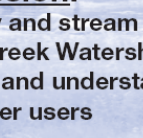
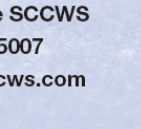
Common burdock




Canada thistle

Common tansy

Ox-eye daisy

Field bindweed

Yellow starthistle

Downy brome

Go to our website for the answers!

Photo credits: Angela Salzl; Debbie Nordstrom; Richard Old, XID Services, Inc., Bugwood.org; Steve Dewey, Utah State University, Bugwood.org; Peggy Greb, USDA Agricultural Research Service, Bugwood.org; Mary Ellen (Mel) Harte, Bugwood.org

Our Mission:

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

Contact the SCCWS @ 778-5007 or www.sccws.com

2008 Watershed Tour

The Stewards hosted a tour of the watershed on June 19th as part of the Watershed Protection Plan process in partnership with the Saskatchewan Watershed Authority (SWA). Participants included SCCWS staff and members, SWA and PFRA personnel, industry representatives, and various other residents of the watershed.

The tour included many interesting stops such as the City of Swift Current water treatment plant, Highfield Dam, the Rush Lake Irrigation Project, Duncairn Dam, Lac Pelletier for lunch, Ferguson Bay, the Rock Creek Hydrometric Station, Town of Shaunavon effluent project, Pine Cree, and finally the SPARC research station for a steak supper. We would like to thank the speakers who shared their expert knowledge at each of the sites: Kevin Wingert and Gord Hagen (SK Watershed Authority), Ray Klein (PFRA), Ron Dolter (SK Ministry of Industry), Pete Allen (Town of Shaunavon), Calvin Fiala (SK Ministry of Environment), and Don Lundberg (Landowner, RM of Arlington).

Thanks to everyone who partcipated, as well as Sunwest's bus driver, John, who went where no bus has gone before! Also, a big thank you to Cecile Blanke, a Métis elder who enthralled us with her stories of Métis heritage at Lac Pelletier, Bryce Burnett for sharing his cowboy poetry, and Clancy's and the Caddyshack who prepared the food for the tour.

Did you know...

- **About 70% of the earth is covered in water.**
- Freshwater lakes and rivers, ice and snow, and underground aquifers hold only 2.5% of the world's water. Saltwater oceans and seas contain the rest.
- **30.8% of the world's freshwater supply is groundwater, including soil moisture, swamp water and permafrost.**
- Only 0.3% of total global fresh water is stored in lakes and rivers.
- **Canada has about 25% of the world's wetlands – the largest wetland area in the world.**
- 15 to 25% of the Prairie Region is wetland.
- **50% of the world's wetlands have been lost since 1900.**

Source: Environment Canada, http://www.ec.gc.ca/water/en/e_quickfacts.htm

CREDITS AND ACKNOWLEDGMENTS

We gratefully acknowledge the support and assistance of many persons and organizations toward the completion of this newsletter.
The Prairie Farm Rehabilitation Administration (PFRA) and SK Watershed Authority (SWA) as well as the many other sponsors who provided the SCCWS with funding for our 2007-2008 project year.

Funding for the Agri-Environmental Group Plan and Canada-Saskatchewan Farm Stewardship Program was provided by the Agri-Environmental Group Planning Initiative in Saskatchewan.
Funding for the Swift Current Creek Invasive Plant Species Control Program is provided through the Native Plant Society of Saskatchewan – Invasive Alien Species in the Community and the Provincial Green Strategy.

"Know Your Watershed" is a newsletter produced by the Swift Current Creek Watershed Stewards.
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Agriculture and Agri-Food Canada / Agriculture et Agroalimentaire Canada
Prairie Farm Rehabilitation Administration / Administration du rétablissement agricole des Prairies

Native Plant Society of Saskatchewan Inc.

Husky Energy

Government of Saskatchewan

Penn West Energy Trust

PLAINS Marketing Canada, L.P.

Saskatchewan Watershed Authority

Shaunavon

RM of SWIFT CURRENT No. 137
RM of SASK LANDING No. 167
RM of EXCELSIOR No. 166
RM of CARMICHAEL No. 109
RM of LAC PELLETIER No. 107
RM of WEBB No. 138
RM of ARLINGTON No. 79
RM of MORSE No. 165
RM of COULEE No. 136
RM of BONE CREEK No. 108

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HAVE YOU SEEN THIS PLANT?

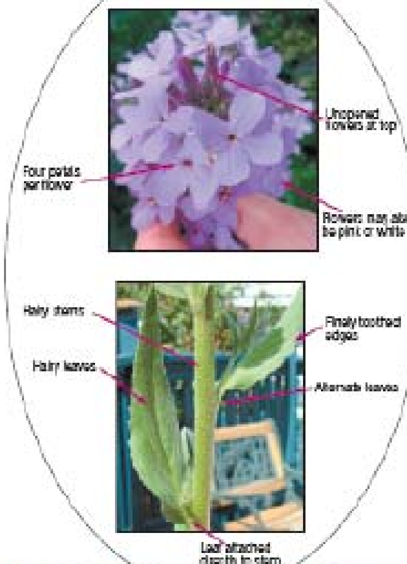
DAME'S ROCKET

Aliases:
Dame Rocket
Mother-of-the-evening
Dame's Violet
Violet Sweet Rocket

Dame's Rocket Seedpods

Dame's Rocket 1st year basal rosette growth

- Dame's Rocket (*Hesperis matronalis*) is native to Europe and Asia and is a member of the mustard family.
- Dame's Rocket was originally introduced to North America in the 1600's as an ornamental garden plant.
- Dame's Rocket has no natural predators or diseases in North America, and produces a huge number of seeds, allowing it to spread quickly in favorable conditions.
- It is a hardy plant that tolerates a wide range of soil conditions.
- Its prolific seed set enables it to spread.
- It can dominate moist areas of meadow, forest edges and riparian woods and exclude native plants.



Many of the suspected Purple Loosestrife sites that were phoned in to the Saskatchewan Purple Loosestrife Hotline were actually Dame's Rocket; for example, many sites have been spotted along Swift Current Creek. Because of its invasive nature, as much care has to be given with Dame's Rocket as Purple Loosestrife.

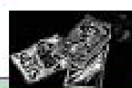
Clipping or pulling flowering Dame's Rocket plants can reduce the seeds in soil. Other ways to control Dame's Rocket include herbicide application (glyphosate), burning and mowing. Herbicide should not be used in riparian areas to avoid water contamination. Control should be done every year to eliminate the seed bank in the soil.

Dame's Rocket often does not spread in your garden because their seeds require moist conditions for germination.

Dame's Rocket blooms from June to early July and has very fragrant flowers.

Disposal of Dame's Rocket Plants

- Dig out the entire plant or clip it off near the ground while the plant is flowering at its peak, before it has set seed.
- 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 of weeks, so the vegetation will rot. After this time the bags can safely be picked up by your regular garbage disposal and taken to the land fill. Alternatively, they can be composted if not flowering yet, or burned if not dry. Burning dry plants causes the seedpod to explode and spread seeds.

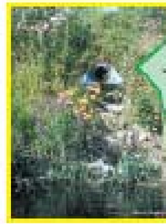


Wildflower mixes often include Dame's Rocket and other invasive plants.

Check the label of the seed package before planting this mix, or avoid wildflower seed mixes altogether!

Environmental Impacts of Dame's Rocket & Leafy Spurge

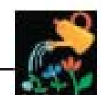
- Replaces native wetland communities
- Eliminates food and shelter for wildlife species
- Reduces biodiversity
- Impacts fish spawning habitats
- Reduces available waterfowl habitats
- Threatens prairie pothole habitat where a large portion of North America's waterfowl breed
- Impairs recreational use of wetlands
- Impedes water flow in drainage and irrigation ditches
- Reduces land productivity for livestock



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

Each Dame's Rocket plant can produce up to 20,000 seeds!

If left unchecked Dame's Rocket and Leafy Spurge will spread rapidly, choking out native vegetation.



Garden Alternatives

If you have Dame's Rocket or Purple Loosestrife growing in your garden, these are some non-invasive alternatives that are just as beautiful!

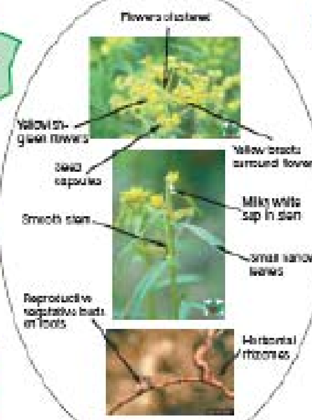
- ✓ Blazing Star (Liatris)
- ✓ Speedwell (Veronica longifolia)
- ✓ Monkshood (Aconitum napellus)
- ✓ Delphinium spp.
- ✓ False spirea (Astilbe arendsii)
- ✓ Lupine (Lupinus)
- ✓ Lobelia (Lobelia cardinalis)
- ✓ Salvia (Salvia superba)
- ✓ Fireweed (Epilobium angustifolium)
- ✓ Giant hyssop (Agastache foeniculum)
- ✓ [illegible]
- ✓ Garden lily (Lilium spp.)
- ✓ Iris spp.
- ✓ Western wild bergamot (Monarda fistulosa) or Bee balm
- ✓ Garden phlox (Phlox paniculata)

You may find them in the
RIPARIAN ZONE

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

LEAFY SPURGE

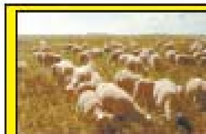
Leafy spurge's milky sap can cause rashes on human skin, and can be toxic to various animals.



Leafy Spurge infests over 5 million acres of land in the United States and the Canadian prairies!
– Team Leafy Spurge

Leafy spurge costs producers and taxpayers an estimated $144 million per year in Montana, Wyoming, North and South Dakota alone!
– Team Leafy Spurge

THE KEY TO SUCCESS IN THE BATTLE AGAINST ANY INVASIVE PLANT SPECIES IS TO CATCH POPULATIONS EARLY, OR IF THEY ARE ESTABLISHED, PLAN LONG-TERM MANAGEMENT, MONITOR THE EFFECTS OF YOUR MANAGEMENT, ADJUST AS NECESSARY, AND NEVER GIVE UP THE FIGHT!



Grazing with sheep and goats is one way to manage Leafy Spurge. Others include releasing Leafy Spurge flea beetles, mowing and herbicide application (except in riparian areas).

If you see these invasive plants anywhere, please report them to the Swift Current Creek Watershed Stewards. The SCCWS are compiling a database of all invasive plant populations in the watershed and we need your help! If possible, please mark the location with a GPS or with a physical marker and land location so it can be easily found again.

Photo credits: Team Leafy Spurge; Saskatchewan Watershed Authority; Steve Dewey, Utah State University, Bugwood.org; William M. Ciesla, Forest Health Management International, Bugwood.org; Angela Stout; Debbie Nordstrom; Richard Old, XID Services, Inc., Bugwood.org; Alberta Agriculture; C. Pyle, USDA-NRCS.