

# SPECIAL AREAS BOARD



## Notes from the Field — April 2017

### Hardpan, Gumbo, Burnouts: What's Going On With My Soil?

While you may not have heard the term 'solonetzic soil' before, you likely have heard 'hard pan', 'gumbo' or 'burn outs' when describing the land within Special Areas. Solonetzic soils are characterized by hard layers of soil restricting root and water penetration, resulting in reduced yields and wavy crop growth patterns. Solonetzic soils are not caused by poor management, but do require special understanding to manage their unique composition.

In non-solonetzic soils, the sand, silt and clay particles are held together by calcium, magnesium and organic matter forming larger soil aggregates. The calcium, magnesium and other elements are a result of the breakdown of parent material over millions of years. In the case of grasslands, the parent material is often sedimentary rock weathered by glaciers, and is mixed with humus (organic matter) to form top soil. This type of soil is called chernozemic soil, and has a large ratio of calcium to sodium.

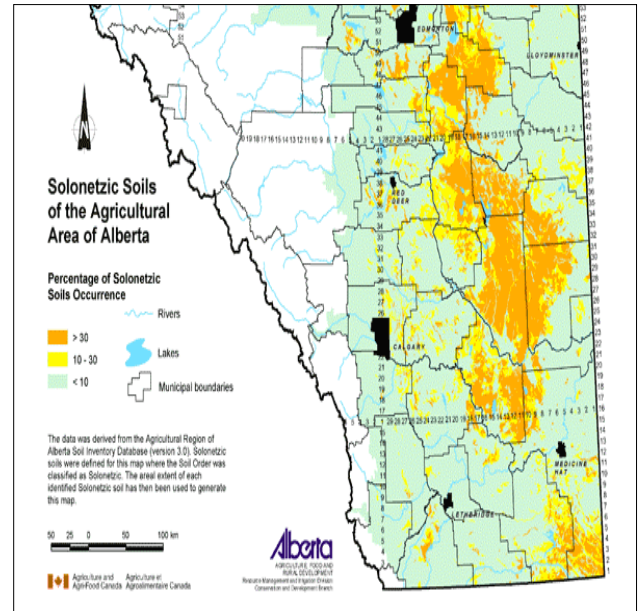
When the parent material has a smaller ratio of calcium to sodium, the resulting soil is sodium rich. With continued downward movement of groundwater, soluble salts from

the sodium rich ground are leached, leaving positively charge sodium ions available to bind tightly to negatively charged clay particles. This tight binding creates a clay layer of hard pan almost impenetrable by roots and water, called solonetzic soil.

Over time, the layer of top soil erodes leaving 'burnouts'. This is typical of the Bullpound Flat south of Hanna. You may notice columnar structures with an acidic ashy-white layer, characteristic of certain solonetzic soils.

Managing solonetzic soils requires unique strategies. When wet, the hard clay layer can become gumbo-like and takes a long time to dry. To facilitate drying provide surface drainage where possible. These soils dry unevenly, and if cultivated when wet, form large clods difficult to break down. The best strategy is to work them during cool weather and moderately dry conditions. Spring tillage should be shallow and minimal.

Increasing organic matter will significantly improve topsoil structure and productivity. If



possible, return crop residues to the soil, apply manure and plant forage crops with adequate fertilizer. Fertilizer requirements will be similar to non-solonetzic land in the same area, but you may choose to apply less due to the lower yield potential on these soils.



### staff spotlight — Shane Hart

The SA2 Agricultural Service Board is excited to introduce the newest member of our team, Shane Hart. In his seasonal role as Assistant Agricultural Fieldman, Shane will assist with weed control, pest surveys, rental equipment and agricultural machinery calibration and repairs within Special Areas 2. He will also be maintaining water lines, corrals and buildings within Community Pastures.

Shane grew up in the Special Areas and brings practical agricultural experience from working on his family's farm, Hart Ranches, located near Richdale. Shane enjoys dirt biking and spending time with his son, Cameron. As a 3<sup>rd</sup> year pipefitter and a heavy equipment operator, Shane will bring mechanical expertise and a hardworking, motivated attitude to the ASB2 team. Welcome to the Special Areas team Shane!

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## Notes from the Field — March 2017

### We Want You—Volunteer with Your Local Ag Society

Agricultural Societies are volunteer driven, not-for-profit organizations.

Their mandate and diversity make them invaluable in our communities. They support improvements in agriculture and enhance quality of life for all residents by developing educational programs, events, services and facilities.

*Make a difference  
supporting your rural  
community.*

*JOIN YOURS TODAY*

Ag Society	Meeting Dates	Contact Information
<b>Hanna &amp; District</b>	1 <sup>st</sup> Monday of each month, 7:00pm at the Provincial Building in Hanna	Vern Thuroo (403) 854-5853 <a href="#">Hanna &amp; District Ag Society</a>
<b>Spondin &amp; District</b>	2 <sup>nd</sup> Monday of each month, 7:30pm at the Spondin Hall.	Judy Scoville (403) 578-2009 <a href="#">Spondin &amp; District Ag Society Coming Events &amp; More</a>
<b>Berry Creek</b>	1 <sup>st</sup> Monday of each month, 7:00pm at the Hardgrass Hub in Pollockville	Brent Horner (403) 633-0581 <a href="http://www.bcagsociety.com">www.bcagsociety.com</a>
<b>Buffalo</b>	Every last Thursday of each month, 7:30pm at the Buffalo Hall	Marg Schonhofer (403) 379-2272 <a href="#">Buffalo Ag Society</a>
<b>Big Country</b>	Every 3 <sup>rd</sup> Tuesday of each month, 7:30pm at the Big Country Ag Building	Lois Andrew (403) 793-2273 or Diana Walker (403) 664-3622 <a href="#">Crossroads Center- Big Country Ag Society</a>
<b>Consort</b>	TBA	Holly Day 403-577-3031 <a href="#">Neutral Hills Ag Society</a>
<b>Kirremuir</b>	TBA	Jim Murphy 403-552-2265

### 2017 Insect Pest Forecasts Now Available!

Alberta's Insect Pest Monitoring Network released 2017 forecast maps for important crop pests. These forecasts are based on surveys of insect populations the prior year, many of which are completed by local Ag Service Board staff. If you wish to have your fields included speak with your Ag Fieldman.

#### Cabbage Seedpod Weevil

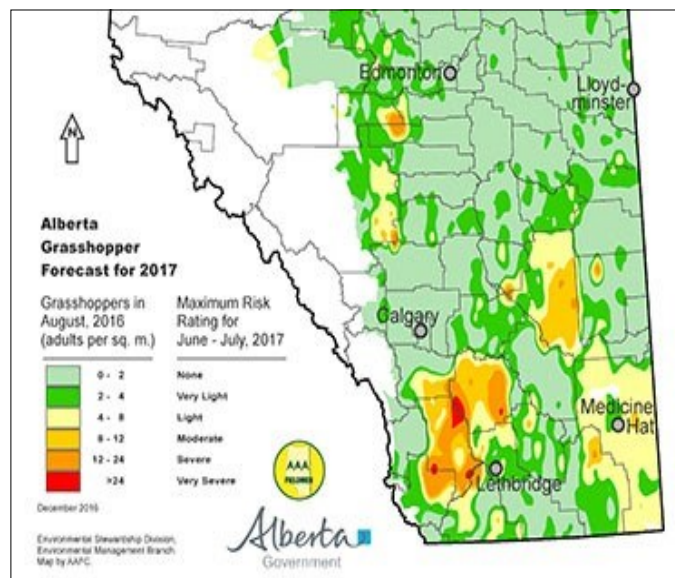
populations are expanding since 2011, with outbreaks as far north as Red Deer. It is strongly advised any canola producers in Special Areas scout their crops as they come into flower as they have the highest risk of damage.

#### Grasshopper

populations decreased in all areas of Alberta except southern Alberta. Forecasted for 2017 are grasshopper hot spots throughout Special Areas 2 and 3.

Moderate/severe risk forecasts indicate grasshoppers could pose a

problem if environmental conditions favor hatching and development in late May through June.



Pea Leaf Weevil ranges continued expansion into central Alberta pea fields in 2016. While Special Areas is included in the most severe risk areas for 2017, it is recommended pea producers apply seed treatment to reduce foliar loss, as well as scout crops diligently.

The 2017 wheat midge forecast shows overall lower levels across Alberta. The traditionally higher wheat steam sawfly populations in the Special Areas and MD of Acadia are also trending lower for 2017. It is important for producers to scout their crops to assess risk based on indicators specific to their farm, as individual fields may still have

economic levels of wheat midge and sawfly.



# SPECIAL AREAS BOARD



## Notes from the Field — April 2017

### Know What You Grow! Don't Plant Invasive Species: Grow Me Instead

From the *Alberta Invasive Species Council*

Some plants from other parts of the globe, originally introduced as garden flowers, for landscapes, or for their medicinal or food value, have jumped the garden fence to become invasive in the natural environment.

Invasive plants are spread, intentionally and unintentionally, by people and their activities. They have NO natural predators to stop their spread so they survive, thrive, and dominate in the wild. Accidental or intentional, these invaders cause not only environmental and habitat degradation, but social and economic loss as well. Their growth and rapid spread is detrimental to native plants and damages natural areas, rangelands, parks, watersheds and lakes. They threaten the biodiversity of our native habitat and endanger wildlife.

While only about 10% of introduced ornamental plants actually become invasive, effective action needs to be taken to avoid planting the ones that do. Choosing suitable alternatives can help prevent future spread and serve to protect and preserve Alberta's natural environment.



#### COMMON BABY'S BREATH

*Gypsophila paniculata*

Ornamental perennial used in floral arrangements. In winter, stems break off, blowing around in the wind, like tumbleweeds, spreading seed to pastures and natural areas. Widespread infestations across Canada and northern United States.

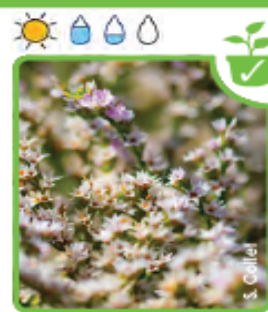


#### NATIVE & ORNAMENTAL ALTERNATIVES

##### German Statice

*Goniolimon tataricum*

Prickly heads of tiny white flowers. Low rosettes of leathery green leaves. Branching heads of flowers bloom July – August. For rock gardens, xeriscaping, edging or containers. Excellent as fresh or dried flowers. Popular for wreaths. Attracts butterflies. CAUTION: All plant parts poisonous if eaten. Zone: 3



Ht. 25-40 cm; W. 30-45 cm

##### Yarrow

*Achillea millefolium*

Alberta native. Herbaceous perennial with broad, flattened heads of flowers and feathery leaves. Commercial cultivars with varying flower colours are available. Zone: 3



Ht. 60-90 cm; W. 60-90 cm

##### Russian Sage

*Perovskia atriplicifolia*

Upright bush. Fragrant, grey-green foliage. Lavender blue blossoms. Flowers July to October. Good for cut flowers/dry arrangements. Attracts butterflies. Zone: 4



Ht. 80-100 cm; W. 60-90 cm

**ALSO CONSIDER:** Hewitt's Double Meadow Rue (*Thalictrum delavayi* 'Hewitt's Double'), Zone 3; White Meadowsweet spirea (*Spiraea betuifolia*), an Alberta native, Zone 3; Sea lavender (*Limonium latifolium*), Zone 3; and Pussytoes (Rosy: *Antennaria rosea*, and Showy Everlasting: *A. pulcherrima*), an Alberta native, Zone 3.

# SPECIAL AREAS BOARD



## Notes from the Field — April 2017

### Upcoming Ag Events in the Special Areas

STARLAND COUNTY PRESENTS

**GARDENING WORKSHOP  
+ TRADESHOW**

APRIL 8TH MUNSON HALL

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**DONNA BALZER**  
CO-HOST OF HGTV'S BUGS & BLOOMS  
CBC RADIO HOST & CALGARY HERALD GARDENING COLUMNIST

**DR. KEN FRY**  
COORDINATOR FOR HORTICULTURE  
ENTOMOLOGY INSTRUCTOR AT OLDS COLLEGE  
CO-AUTHOR OF 'GARDEN BUGS OF ALBERTA'

—————

TOPICS INCLUDE  
DISEASE & PEST MANAGEMENT  
SHELTERBELT TREE PLACEMENT

**\*HANDS-ON ACTIVITY: GROW YOUR  
OWN MUSHROOMS!\***

8:00 AM-9:00 AM TRADESHOW  
9:00 AM-3:30 PM WORKSHOP  
12:15 PM-1:00 PM LUNCH & TRADESHOW  
COST: \$25

TO REGISTER CALL STARLAND  
COUNTY AT (403) 772-3793

**HANNA**

**Farmers' Market**

**Round Up Centre**  
400 Pioneer Trail

First farmers market is  
May 10th. Continues every  
Wednesday from 12:00pm  
to 5:30pm

**14th ANNUAL  
Southern Alberta Grazing School  
For Women**

Registration  
Deadline:  
July 18th  
Cost: \$100.00

REGISTER BY JUNE 16<sup>TH</sup> FOR YOUR CHANCE TO WIN A PRIZE!

**JULY 25<sup>TH</sup>-26<sup>TH</sup>  
2017**

To Register Contact:  
Kristi Stebanuk  
Ph: 403-382-0927  
email:  
kstebanuk@coysandfish.org

Link to Register:  
<https://2017SAGSW.eventbrite.com>  
Blogspot  
[southernalbertagrazingschool.blogspot.ca](http://southernalbertagrazingschool.blogspot.ca)

**MUNSON  
COMMUNITY HALL  
STARLAND COUNTY, AB**

TOPICS INCLUDE

- Range & Riparian Health
- Local Plant Identification
- Floating Islands
- Pasture Weeds
- Post Calving Care & Bovine TB
- Tour Starland County in an AC Bus
- \*\* Evening Social Opportunity to the Historic Last Chance Saloon in Wayne\*\*

**STARLAND COUNTY**

County of Warner, Alberta, Environment and Parks, C.A.R.A., and other partners.

## Your Agriculture Fieldmen

JESSE WILLIAMS

DON HOGAN

JUSTINE SIMPSON



SA2

(403) 854-5625/(403)  
854-1114



SA3

(403) 664-3618/(403)  
664-5585



SA4

(403) 577-3523/(403)  
575-5525

We offer support for programs including:

- ◆ Plant identification & noxious weed control
- ◆ Grazing management & strategies
- ◆ Pest management & controls
- ◆ Growing Forward 2
- ◆ Environmental Farm Plans
- ◆ Shelterbelt programs & planning
- ◆ Animal predation concerns
- ◆ Equipment rentals including RFID tag readers & pest traps
- ◆ Concerns related to *Soil Conservation Act*, *Weed Control Act*, *Agricultural Pest Act*, *Animal Health Act*, and other legislation.

### Special Area No. 2

Hanna District Office  
(403) 854-5600

### Special Area No. 3

Oyen District Office  
(403) 664-3618

### Special Area No. 4

Consort District Office  
(403) 575-3523