

BEE LINES

SUMMER 2011

ISSN #0840-6420

Issue # 119

CROPS

PROVINCIAL FUNDING IS AVAILABLE FOR FARM BUSINESS

1. Farm Business Development Initiative (FBDI)

The Growing Forward Farm Business Development Initiative assists farmers to adopt progressive farm business management practices and strategies in nine business management areas – business strategies, marketing, production economics, human resources, financial management, succession planning, business structure, risk management and environmental strategy.

Farmers and ranchers may be eligible for reimbursement of costs incurred when accessing eligible farm-related training and consulting services.

1. Eligible applicants may receive assistance of up to \$4,000 based upon a reimbursement rate of 75 per cent of eligible costs.
2. Applicants under the age of 40 may also be eligible for assistance in an amount up to \$10,000 based upon a reimbursement rate of 90 per cent of eligible costs.
3. Participants must complete a Taking Stock needs assessment document,

and create a personalized Farm Development Plan in order to access these benefits.

To get started with FBDI:

- Obtain a Taking Stock booklet from the Saskatchewan Ministry of Agriculture website or from your local Regional Service's office.
- Complete the Taking Stock needs assessment on your own, with the assistance of your regional farm business management specialist or by attending a Taking Stock workshop in your area.
- Arrange an appointment with your local Saskatchewan Ministry of Agriculture regional farm business management specialist to develop a personalized farm development plan (based on the results of Taking Stock). The specialist will help you determine what information, training and consulting services are available to complete your farm development plan.
- Complete an application for funding with your regional farm business management specialist and submit it for approval.

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2. What's Your Business SAVI?

Another Saskatchewan Ministry of Agriculture program has everyone asking, "What's your business SAVI?" The Saskatchewan Agri-Value Initiative (SAVI) Program, part of the Growing Forward Policy Framework, was designed to allow agri-businesses access to information and business analysis, and growth and development funding to enable them to make sound business decisions and capture market opportunities.

This program targets small to medium-sized businesses involved in the value-added processing sector of agricultural products. To be eligible for SAVI support, enterprises must be interested in establishing or growing their value-added business. Agricultural enterprises and producer/processor organizations who wish to collaborate on value-added products or services may also be eligible for support. Applicants must have a significant business interest in Saskatchewan, although they do not have to be headquartered in Saskatchewan.

To access SAVI program dollars, agri-businesses must have a recently completed business plan or complete a new business plan or business assessment with their regional farm business management specialist. The business assessment document is a tool that helps agri-businesses understand their growth and development needs.

Applicants can apply for four different components within the SAVI Program. The components and maximum program dollars available are as follows:

1. Product and Prototype Development (\$60,000) – Funding is provided for prototype, product and process development.
2. Marketing/Building Business Partnerships (\$40,000) – Funding is provided to support incremental marketing activities for either a new or existing product entering a new market. The funding is also to encourage co-operation between businesses for a more competitive and profitable region or industry.
3. Systems Improvements (\$20,000) – Funding is provided to assess the adoption of innovative, new/improved technologies and systems in order to increase profitability and growth.
4. Skills and Training (\$5,000) – Funding is provided to improve business skills.

A company is able to access a maximum of \$100,000 subject to the individual component maximums stated above.

For more information about FBDI or SAVI programs:

Visit Saskatchewan Agriculture's website at www.agriculture.gov.sk.ca or contact your local Regional Service Office at:

| | |
|------------------|----------------|
| Moose Jaw | 1-866-457-2377 |
| North Battleford | (306) 446-7962 |
| Outlook | (306) 867-5575 |
| Prince Albert | (306) 953-2363 |
| Kindersley | (306) 463-5513 |
| Watrous | (306) 946-3230 |
| Swift Current | (306) 778-8285 |
| Tisdale | (306) 878-8843 |
| Weyburn | (306) 848-2857 |
| Yorkton | (306) 786-1531 |

58th ANNUAL BEAVERLODGE BEEKEEPERS' FIELD DAY

The 58th annual Beaverlodge Beekeepers' Field Day will be held on Friday, June 24, 2011, at the Agriculture and Agri-Food Canada Research Farm in Beaverlodge, Alberta.

The program will begin at 10:00 am and will include outdoor demonstrations as well as talks from professionals on the latest findings in bee research.

Don't miss the FREE non-BBQ sponsored by honey industry members.

For more information contact Dr. Steve Pernal at pernals@agr.gc.ca

REGISTRATION UPDATE

Beelines is sent to all registered beekeepers in the province. Beelines is used to update the mailing list and, every time it is printed, there are returns from people who have either moved away or are no longer keeping bees.

If you are no longer keeping bees and do not foresee keeping bees in the future, contact the Apiculture Office in Prince Albert and your name will be removed from the list of registered beekeepers. You can contact us by calling (306) 953-2304 at anytime (and leaving a message with your name and address) or you can send an email to geoff.wilson@gov.sk.ca.

WINTERING SURVEY

Please take the time to fill out the winter survey form. This survey will help to identify current trends in the industry, what is working and how improvements can be made. It is important to get responses from as many beekeepers as possible. Your answers will be treated as confidential and no names or addresses will be recorded.

Please return your completed survey to:
Geoff Wilson
Saskatchewan Ministry of Agriculture
800 Central Ave, Box 3003
Prince Albert SK S6V6G1
Fax: 306-953-2440
Email: geoff.wilson@gov.sk.ca

Spring/Summer Management

1. How many productive colonies did you operate during the summer of 2010? (Do not include colonies or nucs you produced for sale) _____
(Note: A "productive colony" is defined as a colony which could be used for honey production or pollination services.)
2. What percentage of colonies operated in 2010 were considered "new"? (A "new colony" is defined as a colony that has a new queen and bees or brood transferred from a parent colony. These may be purchased, or splits made by the beekeeper.) _____ %
3. How many times were the majority of your colonies moved for honey production last year? (Do not include an initial short-distance move from a wintering site or spring yard to a yard within your traditional territory.) _____
4. Approximately how many kilometres (outbound and returning) were the majority of your colonies moved last year to produce a honey crop or to provide pollination services? _____

5. How many colonies did you requeen last year? _____
6. What is the origin of the majority of your queens?
Reared by the colony itself _____
Reared from one of your own selected queens _____
Acquired from a Canadian queen breeder (same province) _____
Acquired from a Canadian queen breeder (different province) _____
Acquired from a queen breeder from the U.S. (Hawaii) _____ (California) _____
Acquired from a queen breeder from Chile _____
Acquired from a queen breeder from New Zealand _____
Acquired from a queen breeder from Australia _____
Other (Specify) _____

Fall Management

- Please indicate the single best answer that describes your operation. For a choice of "other" please write in an appropriate response.
7. What type of sugar-based feed did you use in the fall (e.g. table sugar, sucrose syrup, high-fructose corn syrup, honey or other)? _____
 8. What method of feeding did you use (e.g. barrel feeding, individual feeders or other) _____ ?
 9. Did you monitor for varroa mites in the fall (yes or no) _____ ?
 10. If 'Yes', what method of monitoring did you use (chose one: mite-wash, sticky board, other)? _____ If known, what was the level of infestation (as a percentage) or the number of mites naturally falling on sticky boards per 24-hour period? _____
 11. Did you treat for varroa mites in the fall (yes or no)? _____

12. If 'Yes', which product did you use (e.g. Apistan®, CheckMite+™, Apivar®, Mite-AwayII™, 65 per cent formic acid, oxalic acid or other)? _____
13. Did you monitor for nosema disease in the fall (yes or no)? _____
14. Did you treat for nosema disease in the fall (yes or no)? _____
15. If 'Yes', what method of application did you use (e.g. Fumagilin-B in syrup, Fumagilin-B as a Drench, or other)? _____

Winter Management

16. What was the total number of viable colonies put into winter in your operation in October 2010? _____
- From the above total, how many were full-sized colonies that were wintered indoors? _____ or outdoors? _____
- Also from the above total, how many were nucs wintered indoors? _____ or outdoors? _____

Winter Survival

17. As of May 1, 2011:
How many colonies that survived the winter were considered commercially viable (i.e. with four or more frames of bees)? _____

Important: For the above, do not include any new nucs or increases made during the spring of 2011, colonies purchased or colonies made commercially viable by uniting.

(Note: A frame of bees is defined as having 75 per cent or more of its surface covered, on both sides, with a single layer of bees.)

From the above total, how many were full-sized colonies that survived the winter indoors? _____ or outdoors? _____

Also from the above total, how many of these were nucs that survived the winter indoors? _____ or outdoors? _____

18. On May 1, 2011, what did you calculate as your overall rate of wintering loss for full-sized colonies? Include dead colonies and those too small to be commercially productive. _____%



Taking samples for detection of Varroa mites
Photo by: Geoff Wilson, Saskatchewan Ministry of Agriculture

SASKATCHEWAN SMALL HIVE BEETLE SURVEY – 2011

Small hive beetles (*Aethena tumida*) are an invasive pest native to sub-Saharan Africa. These beetles were found in Florida in 1998 and have since spread through much of the United States. In Canada, they have been found in Alberta (2006), Manitoba (2002 and 2006), Ontario (2010) and Quebec (2008, 2009 and 2010). These findings have been limited geographically in each province, and it is still unknown if the beetles will establish in Canada.

There have been recent instances of small hive beetles (SHB) found in shipments of honey bee queens originating from Hawaii. On April 7, 2011, one live SHB adult was found in packaging material associated with queens in Manitoba, and early larval instars of SHB were found in queens received in Alberta and Manitoba.

Provincial apiarists will be working closely with the Canadian Food Inspection Agency (CFIA) and importers to ensure that Hawaiian queens are examined for SHB. Although there are protocols in place to mitigate the risks of introducing and spreading the SHB from Hawaii, there is still a small risk of the beetles getting through the procedures.

To determine if SHBs have made it into Saskatchewan, the Saskatchewan Ministry of Agriculture and the Saskatchewan Crop Insurance Corporation (SCIC) are working together to survey one-third of commercial beekeeping operations in the province this year. The provincial apiarist or an inspector from Crop Insurance will contact beekeepers to arrange a date to place traps in bee colonies. In cooperating beekeeping operations, traps will be set in eight colonies in three bee yards per beekeeper. The traps will later be removed and shipped to the provincial apiculturist's office for inspection.

Identifying SHB

Despite the efforts to keep SHBs out of Saskatchewan and the upcoming inspection program, there is still a risk of beetles entering into beekeeping operations in this province. In this event, it is important to learn how to recognize these beetles so that proper actions can be taken.

Eggs: SHB eggs are about two-thirds the size of a honey bee egg, white and elongated, and are typically laid in clusters.



Small hive beetle eggs.

Photo by: Josephine Ratikan, University of Florida

Larvae: SHB larvae range in size from 2 mm to 11 mm in length, depending on their instar. They are white to tan in colour, with a dark tan head, forked process at the hind end, and three pairs of legs.



Small hive beetle larvae found in queen shipments from Hawaii.

Photo by: by Mardi Desjardins, MAFRI

Adults: Adult SHBs are 5.5 mm to 5.7 mm in length, 3.2 mm in width, dark brown to almost black in colour, round, and with clubbed antennae (i.e. the last three segments of the antennae larger than the previous ones). They have hard, short wings (elytra) that don't cover the full length of body, thereby exposing a small part of the dorsal side of the abdomen



Dorsal view of adult small hive beetle.

Photo by: Lyle J. Buss, University of Florida.

If you suspect that you have found any life stages of these beetles, please contact the Provincial Apiculture office:

Geoff Wilson
Saskatchewan Ministry of Agriculture
800 Central Ave, Box 3003
Prince Albert SK S6V6G1

MAKING YOUR OWN NUCLEUS COLONIES

Part 2: Methods and Timing of Making Nuc Colonies *(Continued from BeeLines Summer 2010 article entitled "Importance of Making Nucs")*

The key to making nucleus colonies (nucs) is to plan ahead. The primary goal for making nucs is to replace your wintering losses for the next year. If they are not needed in that capacity, they can alternatively be used to expand, to replace old and failing queens or to sell to other beekeepers to earn extra income for your operation. Having an excess of nucs is a much better problem than not having enough bees and having to look hard to buy new colonies in the spring.

Nucs can be made most easily during May, June and July. At these times, colonies should be started with a queen or queen cell and enough bees to ensure that, by late August, the population will get to approximately six full frames of brood (which is necessary to ensure good nuc survival when they are wintered outdoors in Saskatchewan).

Often this means that nucs should be made with a queen cell and one or two frames of brood and bees to cover the frames in late May and June. By mid-July, nucs would likely need three frames of brood and a mated queen. If nucs are attempted in August, they must be made much stronger because there is so little time remaining in the season for the colonies to grow.

With some experimentation, the optimal starting size can be determined for individual beekeeper's habits techniques and operations.

To make nucs, brood and bees are taken from parent colonies and furnished in smaller 'nuc boxes'. These boxes typically range in size from four to six frames. In Saskatchewan, a second nuc box is very often placed on top after the nuc has filled the first box, giving a total unit size of eight to 12 frames through the winter. This increased size helps to ensure adequate feed and population of bees for the winter.

There are three commonly used techniques to obtain the bees necessary to establish the nucs.

1. **Take frames of brood and bees from very strong colonies.** This will reduce the likelihood of swarming in the parent colonies by weakening them. These colonies will quickly replace the brood.
2. **Use the weak colonies to make splits.** Weak colonies are typically not viable production units but can sometimes be turned into multiple nucleus colonies for the next year. Using them in this way makes them more valuable than the honey that they could have produced. Caution should be used with this source of bees. Weak colonies should be closely inspected for disease to be sure that it is not passed on to the nucleus colonies.
3. **Extra nucs that are not needed.** If available, they are an excellent source of bees and brood because they do not reduce the strength of established colonies.



A four-frame nucleus colony that was prepared one month earlier with two frames of brood and a queen cell. This nuc is ready for another box or honey super.

Photo by: Geoff Wilson, Saskatchewan Ministry of Agriculture