# Beelines

## DISEASE CONTROL RECOMMENDATIONS 2015

Spring 2015

### Management Planning

**NOTE: The following is an overview of the control options for pests and diseases. Read all labels before applying the treatment. The directions on the label are the law. Application methods can change, so label directions take precedence over recommendations provided in this document. If intending to export honey to other countries, be aware that control products and maximum residue limits may vary from Canadian regulations and make treatment decisions accordingly.**

A management plan for mite control that uses multiple treatment tools is important. Using products with different active ingredients reduces reliance on a single product, and will help fight the development of resistance to a specific active ingredient. After a product is used, test mite levels to determine if the treatment was effective. In many regions of the province, Varroa mites are resistant to some treatments, so remember to “test – treat – test”.

The following are examples of mite control plans that should be effective for both tracheal and Varroa mites:

1. Organic acid treatment regimen
    a. Formic acid or Thymovar in the spring
    b. Oxalic acid in late fall/early winter.
2. Synthetic and organic acids treatment regimen
    a. Formic acid in the spring
    b. Checkmite+™ OR Apistan® OR Apivar® in the fall (never use these products at the same time and check for resistance before using these products).

**Varroa Mite (Varroa destructor) Control Monitoring**

Monitoring, or testing, is becoming essential in mite management. It is important to know the levels of mites in the bee colonies to be able to make appropriate treatment decisions. Do not treat individual colonies; treat the entire bee yard, if not the entire operation.

There are many methods for monitoring Varroa mite levels, and all have advantages and drawbacks. The two simplest and most effective sampling techniques are described here.

**Alcohol wash**

In a jar containing approximately 150 ml of ethyl alcohol, collect a sample of 300 bees from near the brood area of the colony. Shake the bees vigorously for two to five minutes. Place a white cloth over a bucket and a screen over the white cloth. Pour the bees and alcohol onto the screen, allowing the alcohol to drain into the bucket. Rinse the jar with another 150 ml of alcohol and pour over the sampled bees. Rinse the bees with another 150 ml of alcohol. Look for mites on the white cloth. Adult mites will resemble a reddish-brown flattened oval, one to 1.8 mm long and 1.5 to two mm wide. Repeat the washing process until no additional mites are found. The alcohol can be reused for more samples.

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Alternatively, collect a sample of approximately 300 bees in a jar of alcohol and ship it to the honey bee diagnostic lab to be examined for tracheal and Varroa mites.

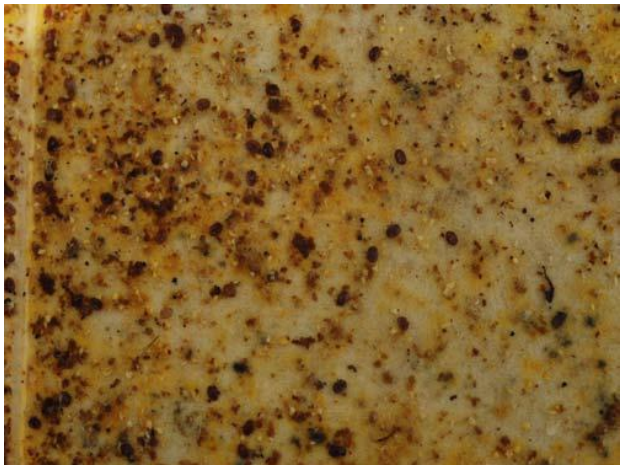
Send samples to:

Geoff Wilson
Saskatchewan Ministry of Agriculture
800 Central Ave, Box 3003
Prince Albert SK S6V 6G1

*Taking a 300-bee alcohol sample*
*Photo: Jennifer Leslie, SBA*

**Sticky bottom boards**

Use commercially prepared insect trap glue or a 50:50 mixture of shortening and petroleum jelly to coat a 30x40-cm sheet of thick paper. Place the paper sticky side up on the bottom board of the bee colony and cover with a screen. Leave the sticky board in place for one to three days. Remove the sticky paper and count the mites; divide the number of mites by the number of days the sticky trap was in the colony.



*A sticky bottom board with Varroa mites*
*Photo: Graham Parsons, SBA*

Current research suggests that the treatment thresholds for Varroa mites are:

- Spring: One per cent mite infestation based on a 300-bee alcohol wash (i.e. three mites per 300 bees) or two mites found on a natural drop sticky bottom board within a 24-hour period.
- Late August: Two per cent mite infestation based on a 300-bee alcohol wash (i.e. six mites per 300 bees) or 10 mites found on a natural drop sticky bottom board within a 24-hour period.

**Treatment Products**

**Apistan®**
**(active ingredient: 10.25% fluvalinate)**
**Treatment window: Spring and fall.**

Strips cannot be applied with honey supers on the colonies. Honey supers can be applied after the treatment is removed.

Remove strips from the package just before application. Do not remove unused strips from the original package. Use one strip for every five frames (or fewer) of bees. The strips should be distributed evenly throughout the brood chamber and need to be in contact with the bees in the brood nest. Remove the strips at the completion of the treatment on day 42. Caution: Wear chemical-resistant gloves while handling the strips.

**Checkmite+™**
**(active ingredient: 10% coumaphos)**
**Treatment window: Spring and fall.**

Strips cannot be applied with honey supers on the colonies. Honey supers can be applied 14 days after the treatment is removed.

Remove strips from the package just before application. Do not remove remaining strips from the original package. Use one strip for every five frames (or fewer) of bees. The strips should be distributed evenly throughout the brood chamber and need to be in contact with the bees in the brood nest. Remove the strips at the completion of the treatment on day 42. Caution: Wear chemical-resistant gloves while handling the strips. It is not recommended to treat with Checkmite+™ more than once per year.

**Apivar®**
**(active ingredient: 3.33% amitraz)**
**Treatment window: Spring and fall.**

Strips cannot be applied with honey supers on the colonies. Honey supers can be applied 14 days after the treatment is removed.

Remove strips from the package just before application. Do not remove remaining strips from the original package. Use one strip for every five frames (or fewer) of bees. The strips should be distributed evenly throughout the brood chamber and need to be in contact with the bees in the brood nest. Remove the strips at the completion of the treatment on day 42. Caution: Wear chemical-resistant gloves while handling the strips.

**Repeated Application Pads**
**(active ingredient: 65% formic acid)**
**Treatment window: Spring (mid-May to mid-June) and fall (as soon as the honey supers are removed). Formic acid treatments must be finished two weeks before honey flow.**

Apply 35 mL of a 65-per-cent formic acid solution in an absorbent pad on the top bars of the colony. Repeat the treatment six times four days apart. Some variations (in accordance with the registration) may be made to the treatment to improve the efficacy. Caution: Wear appropriate safety gear including goggles, chemical-resistant gloves, respirators fitted with an organic acid filter, protective clothing and boots.

**MiteGone**
**(active ingredient: 65% formic acid)**
**Treatment window: Spring (mid-May to mid-June) and fall (as soon as the honey supers are removed). Apply when daytime temperatures are between 10 C and 30 C Formic acid treatments must be finished two weeks before honey flow.**

Seal all holes in the hive except for the bottom hive entrance. Soak pads in a 65-per-cent formic acid solution. Do not unwrap pads. Install pads on the outermost frame between the wall of the brood chamber and the last frame. Using tooth picks, fasten the pad vertically to a brood comb with cut end facing down. Caution: Wear appropriate safety gear including goggles, chemical-resistant gloves, respirators fitted with an organic acid filter, protective clothing and boots.

**Oxalic Acid**
**(active ingredient: >99.6% oxalic acid dihydrate)**
**Treatment window: Late fall and early spring when there is little to no brood in the colony.**

**Vapourizer Method.** Seal all cracks and the upper entrance, and restrict the lower entrance of the hive. Smoke bees on the bottom entrance. Place two grams of oxalic acid dihydrate onto the vapourizer and follow the vapourizer's directions to sublimate the oxalic acid in the bottom entrance.

**Dribble (solution) method.** Mix 35g of oxalic acid dehydrate in one litre of 1:1 sugar/water syrup. Apply five ml of solution to each bee space. Do not exceed 50ml of solution. Caution: Wear appropriate safety gear including goggles, chemical-resistant gloves, respirators fitted with an organic acid filter, protective clothing and boots. Do not treat indoors.

For more information on the conditions of use for oxalic acid, go to:
www.honeycouncil.ca/documents/LabelOxalicE.pdf

**Thymovar**
**(active ingredient: 15g/wafer)**
**Treatment window: spring and late summer to early autumn. For optimal efficacy with the least brood damage, maximum daytime temperatures should be between 12 C and 30 C. Thymovar may not be applied during a honey flow or when there is surplus honey on the hive.**

Singles: Cut wafers in half. Apply half wafers on the frames in each of the two opposite corners of the brood chamber (Note: this is a total of one wafer for a single brood chamber colony). Remove spent wafers after three to four weeks. Reapply Thymovar at the same rate for an additional three- to four-week period.

Doubles: Apply one wafer on the frames in each of the two opposite corners of the top brood chamber (Note: this is a total of two wafers for a single brood chamber colony). Remove spent wafers after three to four weeks. Reapply Thymovar at the same rate for an additional three- to four-week period. Caution: Wear appropriate safety gear, including goggles, chemical-resistant gloves, protective clothing and boots.

**Mite-Away Quick Strips ™ (MAQS)**
**(active ingredient: 46.7% formic acid)**
**Treatment window: Treatment must be completed at least 14 days before harvesting honey; daytime highs should be between 10 C and 33 C.**

Place one strip on the tops of the frames or two strips staggered across the tops of the frames so that the strips reach both sides. Make sure the strips are between five and 10 cm apart. In double-brood chambered colonies, apply the strips between the brood chambers. In single-brood chambered colonies, apply the strips on top of the brood chamber. Make sure that the bottom entrance is fully open. Caution: Wear appropriate safety gear including goggles, chemical-resistant gloves, protective clothing and boots. Avoid inhaling vapours.

**Note: Some beekeepers have reported queen damage after using this product for the first time. This product is best used before mid-August to ensure there is adequate time for queen replacement, if necessary.**

**Non-Chemical Management Techniques for Varroa Mites**

**Stock Selection.** Re-queen colonies with stock selected for Varroa resistance/tolerance.

**Mite trapping with drone brood (may not be practical on a large scale).** Remove old combs that contain drone brood. Place plastic frame with drone foundation into the brood chamber and allow the bees to make drones. Remove the comb before the drones have emerged. Scrape the drone brood off the foundation and replace the frame in the colony. Remove the scrapings from the bee yard and render the wax.

Alternatively, freeze the frame for a week to kill the Varroa mites, and return it to the hive for the bees to clean up. This treatment needs to be repeated six to eight times during a season to achieve 80 to 90 per cent efficacy. Do not allow the drones to hatch; hatching drones will greatly increase the Varroa mite levels in the colony.

**Screened Bottom Boards.** Use an 8x8-inch piece of screened hardware cloth to create a bottom board with at least a 1½-inch space below the screen. Screened bottom boards have an efficacy rate of zero to 30 per cent. Note: These boards may slow down colony development in cold climates.

## Tracheal Mite (Acarapis woodi) Control

**Monitoring.** Samples of approximately 300 bees in alcohol can be shipped to the honey bee diagnostic lab to be examined for tracheal and Varroa mites. Send samples to:

Geoff Wilson
Saskatchewan Ministry of Agriculture
800 Central Ave, Box 3003
Prince Albert SK S6V 6G1

**Treatment Products**
**Repeated Application Pads**
**(active ingredient: 65% formic acid)**
**Treatment window: Spring (mid-May to mid-June) and fall (as soon as the honey supers are removed). Formic acid treatments must be finished two weeks before honey flow.**

Apply 35 mL of a 65-per-cent formic acid solution in an absorbent pad on the top bars of the colony. Repeat the treatment six times four days apart. Some variations (in accordance with the registration) may be made to the treatment to improve the efficacy. Caution: Wear appropriate safety gear including goggles, chemical-resistant gloves, respirators fitted with an organic acid filter, protective clothing and boots.

**Menthol**
**(active ingredient: menthol crystals)**
**Treatment window: Spring (mid-May to mid-June) and fall (as soon as the honey supers are removed). Menthol treatments must be finished two weeks before honey flow.**

**For more information, see the CAPCO Note "Scheduling of menthol for honey bee tracheal mite control" at www.hc-sc.gc.ca/cps-spc/pubs/pest/_decisions/c92-05/index-eng.php.**

Warm shortening just to the melting point (65 C). Mix the warm shortening with an equal amount of menthol by weight. Dip 30x30-cm sheets of corrugated cardboard into the mixture until saturated; remove and cool. Store the sheets in a sealed container in the freezer until they are to be used. Place one sheet of cardboard on the bottom board of the hive and replace it after seven days. Remove the treatment after 14 days. Caution: Wear appropriate safety gear including goggles and chemical-resistant gloves. Use in a well-ventilated area.

## American Foulbrood (AFB) [*Paenibacillus* larvae] Control

**Monitoring.** Brood frames should be inspected for visible signs of AFB (including in the vegetative state or in the dried out scale stage) before use or movement from one colony to another. In addition, brood frames from each colony should be inspected at least once per year for signs of AFB.

*American foulbrood demonstrating the ropey characteristics typical of the vegetative state of AFB*

**Treatment Products**

**Oxysol 62.5 (active ingredient: Oxytetracycline HCL 62.5 mg/g)**
**Treatment Window: Spring and fall, at least four weeks before the main honey flow.**

**Dusting method.** Add 4 g of Oxysol to 35 g of powdered sugar, or one pouch (400g) to 3.5 kg of icing sugar. Mix thoroughly; apply 32 g on the ends of the frames. Repeat three times at four- to five-day intervals.

**Syrup method.** Disolve 4 g of Oxysol in 3kg of syrup or one pouch (400 g) in 300 kg of syrup. Mix thoroughly. Feed 2.5 kg of treated syrup per colony. Repeat three times at five-day intervals.

**Oxytet 25 (active ingredient Oxytetracycline HCL 55 mg/g)**
**Treatment Window: Spring and fall, at least four weeks before the main honey flow.**

**Dusting method.** Add one pouch (454g) of Oxytet 25 to 3.5 kg of icing sugar. Mix thoroughly; apply 32g on the ends of the frames. Repeat three times at four- to five-day intervals.

**Syrup method.** Dissolve one pouch (454 g) in 300 kg of syrup. Mix thoroughly. Feed 2.5 kg of treated syrup per colony. Repeat three times at five-day intervals

*A frame heavily infected with American Foulbrood.*

**Tylan Soluble (active ingredient: tylosin tartrate)**
**Treatment Window: Spring and fall, at least four weeks before the main honey flow. Note: The Saskatchewan Ministry Agriculture only recommends the fall application period for this product.**

**Dusting method.** Thoroughly mix 200 mg of Tylan with 20 g of powdered sugar and apply to the ends of the frames. Repeat three times at seven-day intervals.

**Management of equipment infected with AFB**

Burn all infected frames. Boxes, lids, bottom boards and other equipment may be sanitized by scorching all surfaces of the equipment with a blowtorch.

Bury all infected equipment immediately. Do not allow bees access to the equipment before burial.

Or

Infected equipment may be irradiated in a commercial irradiation facility. There are currently two facilities offering this service, one in Manitoba and one in British Columbia.

Iotron Technologies Corp.
Port Coquitlam BC
604-945-8838

Acsion Industries
Pinawa, Manitoba
204-753-2255

Note: Special permits and restrictions may be in place for movement of infected comb. Contact the Ministry of Agriculture for more details.

Geoff Wilson
Saskatchewan Ministry of Agriculture
800 Central Ave, Box 3003
Prince Albert SK  S6V 6G1

## *Nosema apis* and *Nosema cerana* control

**Monitoring.**

Collect 50 or more older bees typically from the entrance of the hive. Microscopically examine the gut contents for Nosema spores. If spores exceed one million per bee, treat the colonies.

**Treatment products**
**Fumagilin B (active ingredient: Fumagillin Dicyclohexylammonium HS 21 mg/g)**

Prepare a syrup of two parts sugar to one part water. Thoroughly dissolve and mix 454 g of Fumagilin-B into 380 L of syrup, or 24 g of Fumagilin-B to 20L of syrup.

Fall treatment: Feed medicated syrup to colonies at the following rates:
Double-brood chamber – 7 to 8 L of syrup
Single-brood chamber – 4 L of syrup
Five-frame nucleus colony – 3 L of syrup

Spring treatment: Feed medicated syrup to colonies at the following rates:
Double-brood chamber – 3 to 4 L of syrup
Single-brood chamber – 2 L of syrup
Five-frame nucleus colony – 1 to 2 L of syrup
Package bees – 3 to 4 L of syrup

Do not expose fumagillin-treated feed to sunlight.

## Importing honey bee colonies to Saskatchewan from other provinces

Importation protocols, including excerpts from the Canadian Food Inspection Agency's import requirements for honey bee queens from other countries, can be found at http://airs-sari.inspection.gc.ca/Airs_External/Decisions.aspx?lang=1. These protocols are subject to change, so contact the Saskatchewan Provincial Apiarist to confirm current applicability.

**Inspection reports.** Inspection reports must be signed by a provincial apiarist, bee inspector or another individual with the authority under the bees/apiaries act of the province of origin. Inspection records must be provided to the Saskatchewan Provincial Apiarist at least one week prior to the imports entering Saskatchewan.

**Permits.** An import permit will be provided by the Saskatchewan Provincial Apiarist upon satisfactory completion of health certificates.

**Certification.** The apiary of origin must be certified free from honey bee diseases. Bee colonies will be examined as follows:

- Africanized genetics. The zone of origin must have been designated by Canada as free from reports of the African honey bees (*Apis melllifera scuttellata*), and Africanized honey bees hybrids including European honey bee hybrids with Africanized bees.
- Asian genetics. The zone of origin must have been designated by Canada as free from reports of the Asian honey bee (*Apis cerana*) and Asian honey bee hybrids.

**Honey Bee Diseases.** The apiary must be certified free from American Foulbrood (AFB), European Foulbrood (EFB), and Varroa mites (Varroa destructor).

In a bee operation that has more than 500 colonies, 60 colonies from four apiaries are required to be inspected.

In a 100- to 500-colony operation, 40 colonies from four apiaries are required to be inspected. In a bee operation with fewer than 100 colonies, the number of colonies inspected will be determined using appropriate epidemiological principles for detection at the five-per-cent level.

Inspection for AFB, EFB and Varroa mites must occur within 30 days prior to export. Colonies will be eligible for export if no clinical evidence of AFB, EFB or Varroa mites was found.

Bee colonies will be examined as follows:

- AFB and EFB. Visual examination of brood for symptoms of AFB or EFB is required. Bee colonies used in queen production and mating apiaries must be free from visible clinical evidence of AFB or EFB. If either disease is found, colonies will not be eligible for export. At least three brood frames per hive must be inspected. A report must be provided by the provincial apiarist in the exporting province indicating the presence or absence of AFB resistant to Oxytetracycline and Tylosin. Presence of resistant forms of AFB may result in denial of the permit or quarantine upon arrival in Saskatchewan.
- Varroa mites. Colonies must be assessed by alcohol washing of bee samples (200-300 bees per colony). The sample of bees must be placed in a basket and immersed in a solution of alcohol, and the basket should be shaken for a period of at least two minutes. If Varroa mites are not detected or are under one per cent (one mite per 100 bees tested), honey bee colony shipments will be allowed. If Varroa mites are found at levels greater than one per cent, bee colonies must be treated with a product registered in Canada. Treated colonies must be re-tested to confirm that the level of Varroa is below one per cent.
- Small hive beetle. The premises must be certified free of small hive beetles (SHB) (*Aethina tumida*). The bees must originate from a region in Canada free of SHB. The bees must be shipped by the most direct and appropriate route from the point of export to the address of destination in Saskatchewan. The shipment may be ordered removed from Saskatchewan if the manner of shipping is found to be in contravention of transport regulations under the federal Health of Animals Regulations. For all forms of transport, suitable arrangements must be

made for the feeding, watering and care of the bees during transportation, as far as can be determined.

**Importer's obligations.** A physical inspection of the imported bees may be required upon arrival in Saskatchewan.

Honey bees and associated colonies may be quarantined upon arrival to avoid introduction of diseases, resistant diseases and/or pests to areas of Saskatchewan free of those diseases/pests.

In addition to the requirements of Saskatchewan, the importer must also comply with any additional requirements imposed by provinces that the honey bees transit through en route to their final destination. The Saskatchewan Provincial Apiarist must be contacted prior to importation to obtain the current requirements. The importer is responsible for all costs incurred or associated with any testing or treatment of the bees that may be required under the import permit. The issuance of this permit does not relieve the owner or the importer of the obligation to comply with any other relevant federal, provincial or municipal legislation or requirement. Failure to comply with the conditions contained in the requirements or with the provisions of the *Health of Animals Act* and Regulations, or Saskatchewan's *The Apiaries Act* and Regulations will result in the forfeiture of the bees imported or in the removal of the bees from Saskatchewan, all without compensation to, and at the expense of the importer.

**IMPORTATION PROTOCOLS FOR HONEY BEE (Apis mellifera) QUEENS FROM PROVINCES OF CANADA TO SASKATCHEWAN**

Queen importation protocols include excerpts from the Canadian Food Inspection Agency's import requirements for honey bee queens from other countries: http://airs-sari.inspection.gc.ca/Airs_External/Decisions.aspx?lang=1. These protocols are subject to change, so contact the Saskatchewan Provincial Apiarist to confirm current applicability.

**Inspection reports.** Inspection reports must be signed by a provincial apiarist, bee inspector or another individual with the authority under the bees/ apiaries act of the province of origin. Inspection records must be provided to the Saskatchewan Provincial Apiarist at least one week prior to the imports entering Saskatchewan.

**Permits.** An import permit will be provided by the Saskatchewan Provincial Apiarist upon satisfactory completion of health certifications.

**Certification.** The apiary of origin must be certified free from honey bee diseases. Bee colonies will be examined as follows:

- Africanized genetics. The zone of origin must have been designated by Canada as free from reports of the African honey bees (Apis melllifera scuttellata), and Africanized honey bees hybrids including European honey bee hybrids with Africanized bees.
- Asian genetics. The zone of origin must have been designated by Canada as free from reports of the Asian honey bee (Apis cerana) and Asian honey bee hybrids.

**Honey Bee Diseases.** The apiary must be certified free from honey bee diseases (American Foulbrood (AFB), European Foulbrood (EFB), and Varroa mites (Varroa destructor) as follows:

The apiary does not have any visible clinical evidence of American Foulbrood (AFB), European Foulbrood (EFB) or Varroa mites when subjected to the following protocol:

- Five per cent of the colonies or a minimum of 25 bee colonies (whichever is greater) must be randomly selected and examined from each of the queen production and mating apiaries from which queens will be exported. Inspection for AFB, EFB and Varroa mites must occur within 30 days prior to export. Queens will be eligible for export if no clinical evidence of AFB, EFB or Varroa mites was found.

Bee colonies will be examined as follows:

- AFB and EFB. Visual examination of brood for symptoms of AFB or EFB is required. Bee colonies used in queen production and mating apiaries must be free from visible clinical evidence of AFB or EFB. If either disease is found, queens will not be eligible for export. At least three brood frames per hive must be inspected.
- Varroa. Colonies must be assessed by alcohol washing of bee samples (200-300 bees/colony). The sample of bees must be placed in a basket, immersed in a solution of alcohol and the basket should be shaken for a period of at least two minutes. If Varroa is not detected or is under one per cent (one mite per 100 bees tested), honey bee queen shipments will be allowed. If Varroa is found at levels above one per cent, bee colonies in the queen-rearing apiaries must be treated with a product registered in Canada. Treated colonies must be re-tested prior to collecting the queens and attendants to confirm that the level of Varroa is below one per cent.
- Small hive beetle. The premises must be certified free of small hive beetle (SHB) (*Aethina tumida*) as follows:

- Originate from a region Canada considered to be free of SHB; or
- All packing and shipping location(s) on the apiary premises from which the honey bee queens will be prepared for shipping to Saskatchewan have been inspected for SHB with negative results by a provincial apiary inspector within 30 days prior to export. The packing and shipping location(s) must be indoors, must be certified to be free from SHB and must be certified to be inaccessible to entry by SHB at any time during packing and shipping.
- The exporter has provided assurances to the provincial apiary inspector that they have knowledge of and will comply with the following requirements:
    - All packing of queens and attendants into cages and then into shipping boxes for export must be done in the inspected area(s).
    - All queens and attendant worker bees must be caught by hand and placed in new queen cages with ventilation holes no longer than 2 mm x 2mm or if longer than 2 mm are no wider than 1 mm. Worker bee attendants (two to six attendants per queen) must be placed in individual queen cages with the queen and not loose in a battery box. Queen cages filled with queens and attendants must be stored in the designated and inspected packing and shipping location(s) until shipping.
    - All materials for shipping must be prepared and stored in the SHB free inspected location(s) on the apiary premises until use. If any shipping materials (including but not limited to shipping boxes and queen cages) are prepared in advance of the shipment date, they must be stored for a minimum of 72 hours prior to shipment to Saskatchewan in a freezer at -18 C (0 F) located in the inspected location(s).

**Bee Feed.** The food for bees must be certified as follows:

- Food supplied to the bees during transit must not contain honey, or, if honey is used, the honey must have been irradiated to an approved level.

**Shipment.** The bees described on this permit must be shipped by the most direct and appropriate route from the point of export to the address of destination in Saskatchewan. The shipment may be ordered removed from Saskatchewan if the manner of shipment is found to be in contravention of transport regulations under the federal Health of Animals Regulations. For all forms of transport, suitable arrangements must be made for the feeding, watering and care of the bees during transportation, as far as can be determined.

**Importer's Obligations.** A physical inspection of the imported bees may be required upon arrival to Saskatchewan. Honey bees and associated colonies may be quarantined upon arrival to avoid introduction of diseases, resistant disease and/or pests to areas where they do not exist in Saskatchewan. In addition to the requirements of Saskatchewan, the importer must also comply with any additional requirements imposed by other Canadian provinces that the honey bees transit through en route to their final destination. The Saskatchewan Provincial Apiarist must be contacted prior to importation to obtain the current requirements. The importer is responsible for all costs incurred or associated with any testing or treatment of the bees that may be required under the import permit.

The issuance of this permit does not relieve the owner or the importer of the obligation to comply with any other relevant federal, provincial or municipal legislation or requirement.

Failure to comply with the conditions contained in this permit or with the provisions of the *Health of Animals Act* and Regulations, or Saskatchewan's *The Apiaries Act* and Regulations may result in the cancellation of this permit and will result in the forfeiture of the bees imported or in the removal of the bees from Saskatchewan, all without compensation to, and at the expense of the importer.

*Beelines* is sent to all registered beekeepers in the province.

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 any time (and leaving a message with your name and address) or you can send an email to geoff.wilson@gov.sk.ca.