
NEW JERSEY BEEKEEPERS



ASSOCIATION NEWS



VOL 22 ISSUE 2

FEB/MAR 08

Dear all,

Goodbye 2007 and welcome 2008!! Let me start this brand new year by wishing every one of you great things for 2008. Above all, as a beekeeper to my fellow beekeepers, I wish you all healthy bees and prosperous harvests but do not forget to have fun as well...

I was hoping that the worse of CCD was behind us but I start hearing alarming stories again and I certainly wish that they do not come up to NJ. Please keep us posted on any unusual things you notice about your hives or bees as you go along but as we speak and by those awful temperatures, our friends should be cuddling up together and dreaming about spring and flowers.

Those past weeks, I have been in touch with George Hamilton, Specialist in Pest Management at Rutgers who included me in the search committee to fill the Apiculturalist / Pollination Ecologist position open in his department. I have to say that I have been struck by two things:

The first one is the number of applicants and their incredible diversity. Among the 20 applications we have received so far, only two candidates are from NJ. The others are from IL, CA, WA, FL, VA, NC, TX, NY, MA but also from Canada, India and even Slovenia. I am impressed by the great reputation Rutgers has domestically but also internationally.

The second thing is the amazing quality of the applicants. Those resumes are just unbelievable, so rich, so powerful...Making a choice is going to be a tough job but I am very happy to see so many individuals motivated by entomology and more specifically bees.

Do not forget to put two important dates on your calendar. First, the NJ Honey show. As I mentioned in the last newsletter, January 31st will be the last day to get your entries to the Executive Board so that they can be taken to the Agricultural Convention for judging. The rules are now posted on the website and if you do not have access to a computer, just give me a call 908 264 4504 and I will be glad to send you a hard copy. Second, our winter meeting which will take place on Saturday, February 9.

Please, note that we had to change the location at the last minute.

Location: New Jersey Museum of Agriculture, off U.S. Route 1 and College Farm Road, North Brunswick campus of Cook College – Rutgers University

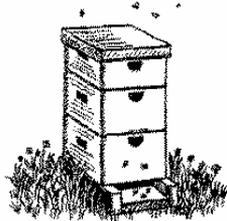
See you all then
Bea

*Directions for meeting on page 3
Meeting agenda on page 9*

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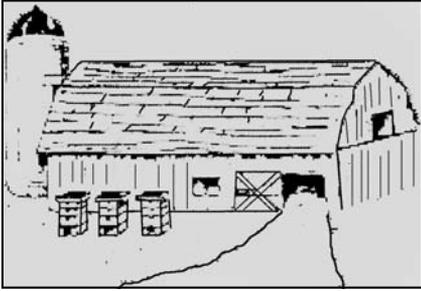
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BEE DATES

Feb. 9, 2008 **Membership Meeting**
N.J. Museum of Agriculture

Feb. 4,5,6, 2008 **State Honey Show**
Crown Plaza Hotel
Cherry Hill, N.J.
856-665-6666

New Jersey Museum of Agriculture

103 College Farm Rd, North Brunswick, NJ 08902
Telephone: (732) 249-2077
FAX: (732) 247-1035
Email: info@agriculturemuseum.org

DRIVING DIRECTIONS;

From New Jersey Turnpike (North or South)
Exit 9 – “New Brunswick” After toll, stay right
onto Route 18 NORTH Follow Route 18 to U.S.
Route 1 SOUTH Get off at third exit: College Farm
Road (Cook College) At end of ramp, turn right
onto College Farm Road Museum is first driveway
on right (look for windmill)

Garden State Parkway (from the South) Exit
129 – “New Jersey Turnpike” Take New Jersey
Turnpike to Exit 9 Follow directions for Turnpike
above

Garden State Parkway (from the North) Exit
130 – “U.S. Route 1 SOUTH toward Trenton”
Follow U.S. Route 1 SOUTH over the Raritan
River Take the fourth exit after River: College
Farm Road At end of ramp, turn right onto College
Farm Road Museum is first driveway on right (look
for windmill)

U.S. Route 1 (from the South) While staying
on U.S. Route 1 NORTH look for intersection with
Route 130 shortly after, pass DeVry Institute on
right side Take next exit: College Farm Road &
Squibb Drive Exit will make U-turn under U.S.
Route 1 to other side At end of U-turn, at stop sign,
turn left onto College Farm Rd. Museum is first
driveway on right (look for windmill)

U.S. Route 1 (from the North) Follow U.S.
Route 1 SOUTH over the Raritan River Take the
fourth exit after River: College Farm Road At end
of ramp, turn right onto College Farm Road Mu-
seum is first driveway on right (look for windmill)
Interstate 287 (South)

Exit 1B: U.S. Route 1 SOUTH Follow U.S.
Route 1 SOUTH over the Raritan River Take the
fourth exit after River: College Farm Road At end
3 of ramp, turn right onto College Farm Road Mu-
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Report from the Apiarist

Well Christmas and New Years have passed and January is upon us. Last Saturday the temperature in Richland NJ hit the high 60's. My bees were flying hard cleansing out in front of the hives. I've been busy sorting equipment, burning junk, and cleaning up the warehouse and honey house. Several stacks of boxes are in the shop waiting to go through the saw for repairs or honey supper conversion. I have a bin full of frames waiting for recycling back into the outfit. I do need to order more foundation. January and February are good months for planning for this coming bee season. How is your equipment? Does any need repair? Are you planning on expanding this year if so what are your equipment needs? Are you going to treat for mites this year? If so what are you going to use? Are you going to go IPM? If so are you converted to screened bottom boards and set up to regularly monitor the varroa drop? Now is the time to repair, assemble and check everything you think you will need. In 6 more weeks farmers in Vine-land will be plowing and planting lettuce transplants and the growing season will start again.

Do you know what (AFB) American Foul Brood disease is? Can you recognize it at a low level in your colonies? I have developed an AFB workshop where we will look at a power point presentation on the disease. I have some frames full of AFB scale that beekeepers will be able to touch, smell and examine. We will discuss control and treatment, as well as hygienic queens in eradicating this disease and keeping it out of your outfit. Several branches have requested this presentation because of AFB problems in their areas. I have seen beekeepers unknowingly spread this disease through out their bee yard by exchanging infected equipment with healthy colonies. Nothing bums out a bee inspector more than a beekeeper that infects his colonies because he cannot recognize this disease. Don't be that beekeeper.

Remember the State Honey show will be judged February 4, 2008. I encourage you all to enter some honey or bee hive product. If you need help getting an entry to the show call me or your branch president and we will do our best to get it there.



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The NJBA winter meeting will be covering Viruses and viral diseases of Honey bees, as well as bear issues. It will be a worth while meeting and I look forward to seeing you there.

If you are interested in selling nucs, packages, or queens in New Jersey please call or e-mail me. Your bee yard will need to be certified in order to do this. The certification involves an inspection for brood diseases and checking the varroa level in the apiary. I will do everything in my power to expedite your request.

If you are interested in Buying New Jersey raised Nucs, queens and packages, I will have a list of Beekeepers who requested a certification to sell. It's always a good idea to buy from a certified apiary.



Letter from the editor

First I would like to thank everyone in their cooperation in helping me get the newsletter together. After finding out about the grange in Columbus closing and not being available for our meeting, everyone had to scurry around, first to find a place and then work on the agenda, all within a few days.

I hope everyone had a happy holidays and are looking forward to the new year. The weather here in Central Jersey is in the 60's, the beginning of Jan. which makes you think of spring right around the corner. The bee's have been flying and buzzing around the house, I even had a few landing on my hat when I was working out by the barn. With this warm weather I hope they don't eat all their stored honey to a danger level, I will probably start to feed them to be safe. I hope we don't have the weather like last year with a real warm Jan. and a subzero Feb. because that subzero weather didn't have any mercy on those small clusters of bees.

In other things to do for the new year is to register your beeyard with the Pesticide Control Program. The registration is voluntary and there is no fee. The form is to be used for beeyards not currently registered. The form must be received by the Pesticide Control Program by March 1 in order for the beeyards listed to be included on the official notification list this year. The forms are available at the N.J. Department of Environmental Protection, Pesticide control program web site, or call 609-984-6992 with any questions.

This year the N.J. Department of Agriculture is proposing treatment on 112,500 acres of forested land to suppress heavy infestation of gypsy moth caterpillars in May and June. The program will include 100 municipalities in 17 counties. More than 87,000 acres will require a second treatment. The N.J.D.E.P. will treat 10,000 acres in state parks and forests. More than half will need a second treatment.

After the devastation in 2007 that left vast stands of trees bare and weakened, New Jersey Secretary of Agriculture Charles M. Kuperus is working cooperatively with state agencies, the federal government, municipalities and other entities to effectively control the gypsy moth and protect our important shade trees and forests.

More than 320,000 acres of trees were defoliated in the spring of 2007, with the resulting death of as many as 14,000 acres of trees due to consecutive defoliation.

Field surveys conducted in the fall of 2007 showed that a heavier population of caterpillars will emerge this May and June. Up to 45,000 acres of trees could be lost this year if not controlled successfully. For inclusion in the program you must have 500 egg

masses per acre and be at least 50 acres in size.

There are two insecticides that they could use. One is BT (*Bacillus thuringiensis*) and the other is Dimilin.

- 1) BT is a naturally occurring bacterial disease of insects. These bacteria are the active ingredient in some insecticides.
- 2) BT insecticides are commonly used against some leaf and needle feeding caterpillars. Recently some strains have been produced that effect certain fly larvae, such as mosquitoes, and larvae of leaf beetles.
- 3) BT is considered safe to people and nontarget species, such as wildlife. Some formulations can be used on essentially all food crops.

BT is a naturally occurring bacterium common in soil through out the world. Several strains can infect and kill insects. Because of this BT has been developed for insect control. BT is the only "microbial insecticide" in widespread use.

The big advantage of BT, is unlike most insecticides, BT doesn't have a broad spectrum of activity, so they do not kill beneficial insects. This includes enemies of insects (predators and parasites), as well as pollinator, such as honey bees. A major advantage is that BT is nontoxic to people, pets and wildlife.

Some of the disadvantages is it is susceptible to degradation by sunlight, it lasts less than a week, and has a short self life.

The other spray dimilin a restricted use pesticide due to the toxicity to aquatic invertebrate animals. Dimilin is an insect growth regulator which is effective on a wide variety of insect pests, predominately from families Lepidoptera and Diptera. Because of its mode of action, which results in a disruption of the normal molting process of the insect larvae, the action is slow and may take several days before the full effect is seen. Because of its specificity, Dimilin does not affect bees or other beneficial insects when used at the label rates.

This pesticide is extremely toxic to crab, shrimp, and other aquatic invertebrates. Do not apply directly to water or areas where surface water is present, or intertidal areas below the mean high water mark, except under the forest canopy when aerially applied to control forest pest.

Both of the pesticides claim that they are harmless to bees but are they in the long term? So with all this spraying going on around us I would register for the notification.

Some neat web sites to check out
www.vanishingbees.com
www.anwo.com/store/bumblebee.html





Whats all the Buzz about!

Medical Honey

Derma Sciences Inc., a West Windsor company that makes medicated and other advanced care products, began selling the first honey-based wound dressing, after it was approved by the U.S. Food and Drug Administration. More than 4000 years after the Egyptians began using honey on wounds.

Called Medihoney, it is made from a highly absorbent seaweed-base material, saturated with Manuka honey, a particularly potent type that experts say kills germs and speeds healing. Manuka honey comes from hives of bees that collect nectar from Manuka and Jelly bushes in Australia and New Zealand.

Under a deal with the supplier Comvita LP of New Zealand, Derma Science hopes to have the dressings in drug stores in the next six months.

It is good news with all these antibiotics becoming ineffective at fighting germs. One of the big advantages is that the Dressing's germ-fighting and fluid-absorbing effects last up to a week. Making it easy for patients to be cared for in out patient clinics or by visiting nurses. It also reduces inflammation and eliminates the foul order of infected wounds.

Honey dressing and gels have gained popularity overseas by scientific reports on their medical benefits, and occasional news accounts of dramatic recovery of a patient with long time wounds suddenly healing.

Medical honey provides a moist, occlusive environment conducive to optimal wound healing making the dressings easy to remove without disrupting the wound bed. The dressings are for the management of moderate to heavily exuding wounds such as:

1. Diabetic foot ulcers
2. Leg ulcers (venous stasis ulcers, and arterial ulcers)
3. Pressure ulcers/sores
4. 1st and 2nd degree burns
5. Donor site, and traumatic and surgical wounds.

With versatility and lack of toxicity it can be used on all stages of wound healing. The honey dressings can also prevent the dangerous drug resistant staph-infection know as MRSA from infecting the wound. It has been used on wounds as a last resort and showed promise. But wouldn't work once an infection that gets into the blood stream.

But don't go out to the honey house and start applying your honey to wounds. Not all honeys are created equally, only Manuka and Jelly bush honeys have characteristics making these honeys ideal for wounds and burns.

1. Do not use honey straight from the supermarket. Honey is know to contain *clostridium botulinum* spores. When used on a wound or burn only sterilized honey products should be used.

2. Use only products that have been standardized to certain specifications. Standardization is achieved by observing the honey's activity level in the presence of catalase. Catalase is an enzyme found in wound fluid and breaks down components in most honeys. Only the Manuka and Jelly bush has shown to retain it activity in the presence of catalase.

All honeys used for dressing are standardized by rating the batches activity. With no activity rated at 0 and other rated at 1, 12, and 15. Only honey rated at 12 and higher should be used in the treatment of wounds or burns.

From the Asbury Park Press and Derma Sciences Web site.

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**New Jersey Beekeepers Association
Winter Meeting Agenda**

February 9, 2008

Location: New Jersey Museum of Agriculture Farm Road, North Brunswick on the campus of Cook College – Rutgers University

- 9:30 – 10:00 AM Registration and coffee and donuts
- 10:00 – 11:00AM Business meeting to include election of officers
- 11:00 – 12:00 PM Dr. Judy Chen of the USDA Beltsville Bee Lab, Maryland, will speak on “Viruses and Viral Diseases in Honey Bees”
- 12:00 – 1:00PM Lunch
- 1:00 – 2:00PM Auction of Honey Show winners’ entries
- 2:00 – 3:00 PM Speaker Mike Madonia, member of the New Jersey Division of Fish and Wildlife Black Bear Response Team

Cost will be \$20.00 per person for adults and children 12 years and older; \$12.00 per child 11 years old and younger, **if paid in advance**. At the door, \$24.00 per person for adults, and children over 12 years old.

Lunch Menu

Sandwiches, Salad, Dessert, and beverages will be provided. Vegetarian sandwiches are available; make your request to Curtis.

Please contact: Curtis Crowell at 609-651-4585. Send check payable to NJBA.

**Curtis Crowell
152 Broad Street
Hightstown N.J. 08520**

No later than February 3rd so he can make sure that there is enough food for all.

BEE MAIL

Charlotte Jordan,
Project Manager
Nov. 27, 2007
303-776-2337, charlotte@nhb.org



BAKING SALES KIT READY FOR HONEY SUPPLIERS

Firestone, Colorado (November 2007)
— The National Honey Board has launched a new sales tool for honey suppliers: the Baking Sales Kit. One simple package now compiles technical research and consumer surveys on using honey in baking. The kit also gives instructions on substitutions and how to compensate for the browning and enzymatic effects of using honey.

The Baking Sales Kit is free to any honey company with bakery clients. This marketing effort is part of a goal to increase honey consumption in the processed foods market, which is estimated at 45% of the total U.S. honey market.

To request a copy or copies of the Baking Sales Kit, contact Charlotte Jordan at (303) 776-2337 or charlotte@nhb.org.

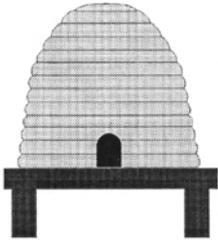
The National Honey Board, through its staff in Firestone, Colorado, conducts research, advertising and promotion programs to help maintain and expand domestic and foreign markets for honey.

The Board’s work, funded by an assessment of one cent per pound on domestic and imported honey, is designed to expand the awareness and use of honey by consumers, the food-service industry and food manufacturers.

National Honey Board
9 11409 Business Park Circle
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Firestone, CO 80504

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Honey Labeling Regulations, Information & Tips

One of the most important decisions that a food marketer has to make is what to put on the label of a food product. It needs to appeal to the consumer and stand out from other food packages on the shelf. There are also legal considerations. And let's face it, when it comes to labeling a honey jar, there's limited space.

Labels MUST communicate the following:

The "Common" Name of the Product

The word "honey" must be visible on the label. The name of a plant or blossom may be used if it is the primary floral source for the honey. Honey must be labeled with its common or usual name on the front of your package. (i.e. "Honey" or "Clover Honey")

Net Weight

The net weight of your product (excluding packaging), both in pounds/ounces and in metric weight (g) must be included in the lower third of your front label panel in easy-to-read type. (i.e. Net Wt. 16 oz. (454 g))

When determining net weight, use the government conversion factor of 1 ounce (oz) = 28.3495 grams or 1 pound (lb.) = 453.592 grams. Round after making the calculation – not before. Use no more than three digits after the decimal point on the package. One may round down the final weight to avoid overstating the contents. When rounding, use typical mathematical rounding rules.

Ingredients

Single ingredient products (such as honey) do not have to name that single ingredient when already used in the common or usual name on the front panel. However, if there are ingredients other than honey, you must list them in an ingredient statement. Some exceptions are spices, flavorings and incidental additives (additives which have no functional role and with minimal presence in the finished product) which have special rules.

The type size for ingredient listings must be no less than 1/16th inch as measured by the small letter "o" or by the large letter "O" if all caps are used in the declaration. There are exemptions that allow smaller type sizes for small packages.

Contact Information

The label must let consumers know who put the product on the market and how to contact that person. The name and the address of the

manufacturer, packer or distributor of a packaged food product are required to appear on the label of the packaged food. This information, sometimes referred to as the "signature line," must appear on the front label panel or the information panel. If space permits, include full address and telephone number.

The information must be in a type size that is at least 1/16th inch tall.

Is my honey organic?

A growing number of consumers look for the word "organic" on a label. "Organic" is not just an adjective, nor is it synonymous with "natural." The USDA has implemented a set of national standards that foods labeled "organic" must meet, whether produced in the United States or imported from other countries. Before a product can be labeled "organic," a USDA-approved certifier inspects the farm where the food is grown to make sure the farmer is following all the rules necessary to meet USDA organic standards. The USDA accredits state, private and foreign organizations or persons to become these "certifying agents."

If you wish to produce or handle agricultural products that can be sold, labeled, or represented as "100 percent organic," "organic" or "made with organic ingredients," you must be certified by an accredited certifying agent. More information on how to become certified can be found on the National Organic Program Web site at www.ams.usda.gov/nop/FactSheets/CertificationE.html and www.ams.usda.gov/nop/NOP/standards/CertReg.html.

Organic food is produced by farmers who emphasize the use of renewable resources and the conservation of soil and water to enhance environmental quality for future generations. Organic food is produced without using most conventional pesticides; fertilizers made with synthetic ingredients or sewage sludge; bioengineering; or ionizing radiation. The USDA Organic seal on a product (shown below) indicates that a product is at least 95 percent organic. Organic labeling standards can be found at www.ams.usda.gov/nop/NOP/standards/LabelReg.html.

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The USDA Organic seal on a product (shown below) indicates that a product is at least 95 percent organic. Organic labeling standards can be found at www.ams.usda.gov/nop/NOP/standards/LabelReg.html.

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From: BEE NEWS & VIEWS

MS. STATE, MS
Harry Fulton, editor

Every thing you wanted to know about drones?

Recently I received an inquiry in regards to queens mating with high quality drones. Specific questions asked included: 1) what is a good drone and what is a bad (undesirable) drone? 2) How can I judge if a colony has bad drones? 3) Does the selection for a drone mother differ from the selection for a queen breeder? If yes, in which way. And 4) when selecting a drone mother colony, what are the selection criteria/factors a breeder should look for and base his selection upon?

There are numerous factors that can affect the quality of a drone and ultimately it's potential mating success. Not all drones are able to supply large numbers of spermatozoa or be competi-

tive during the mating flight. Initially, factors we need to consider are age of the drone, size of the drone, rearing conditions and nutrition during development.

Drone Age- When a drone first emerges from a cell as an adult, he has a very large pair of testes (white, bean-shaped bodies which occupy a large part of the space in the abdomen), full of immature sperm (Dade 1962). The testes attain their greatest development during the pupal stage (Snodgrass 1925). Over the first few days of his adult life, the sperm become more mature, growing closer to their ability to fertilize an egg. Once they are mature, the sperm migrate to paired storage organs, the seminal vesicles and the testes shrink (Collins 2004). When the drone is sexually mature (about 13 days after emergence) the testes are reduced to small (less than one-third their maximum length), greenish-yellow scraps of tissue, all their contents having passed on through the coiled tubes of the vasa deferentia into the seminal vesicles. The seminal vesicles produce the

seminal fluid that with the sperm makes up the semen. There is another pair of organs, the mucous glands, which produce thick white mucus (Collins 2004). It appears that spermatozoa counts peak between days 12 to day 16 after emergence. Sperm production is largely completed by the time the adult drone is sexually mature. Sperm counts go down after the drone is about 20 days of age. The sperm are stored in the seminal vesicles until mating, when they are ejaculated in a packet with mucus from the large mucus glands (Winston 1987).

Drone Size- The cell size determines the body size of emerging drones. Drones emerging from worker cells are smaller in weight and size than those emerging from drone cells (Berg 1991, Berg et al. 1997, Schlüns et al. 2003). Reproductive success of drones seems to vary among drones depending on body size. Comparison of different sized drones indicated that large drones have larger mucous glands and seminal vesicles and produce more spermatozoa than small drones (Gencer and Firatli 2005). Berg et al. (1997) found that small drones reared in worker cells had a reproductive disadvantage compared to large drones reared in drone cells while flying in the drone congregation areas where mating occurs.

Rinderer et al. (1985) reported that Africanized drones weighed significantly less (194.6 mg vs. 220.2 mg) and had significantly fewer spermatozoa than European drones (4.6 million vs. 5.7 million/seminal vesicle), although their seminal vesicles and mucous glands were not significantly different in weight.

Colony Nutrition- Drone eggs and brood are tolerated in colonies as long as forage conditions are good, especially pollen (Connor 2003). Thus drone production is considered to be an

indicator of colony protein nutrition levels. Connor (2003) reports, that there are times especially in the early season, when a large percentage of drones seem to be sterile, producing no semen. This may reflect a lack of proper nutrition during late larval development and/or during early adult maturation.

To fully answer the submitted questions, we will need to consider this topic further next month. Based on our findings so far, it is desirable to have big populations of large-sized, sexually mature drones in the area where queen mating will occur.

References

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- Collins, A. 2004. Inside/out the drone. *Bee Cult.* 132(10): 26-27.
- Connor, L. 2003. The drone. *Bee Cult.* 131(5): 19-22.
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How to Reduce Bee Poisoning from Pesticides

By D.F. Mayer, Ph.D., Washington State University Cooperative Extension entomologist, Prosser;

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Part TWO

BEEKEEPER-GROWER COOPERATION

A major consideration for the reduction of bee poisoning is beekeeper-grower cooperation. Many cases could be cited where a grower, simply through ignorance of the hazard to bees, has caused tremendous damage to a large number of colonies. The timing or materials of the pest control program could have been modified so that little or no poisoning occurred. In many cases this can be done without unduly increasing the control cost or inconveniencing the grower.

Beekeepers should get acquainted with the farmer on whose land they place hives. They should know about pest-control practices and other special problems that might occur.

When the grower rents colonies for crop pollination, definite verbal or written agreements can be made. One type of written contract emphasizes crop production and has the desirable effect of encouraging closer cooperation between the grower and the beekeeper. Such contracts should include details of the responsibility of the beekeeper in providing strong and effective colonies and of the farmer in safeguarding the bees from poisoning. In modern agriculture, the beekeeper often depends on the

grower for bee forage and the grower depends on the beekeeper for pollination. Cooperation and understanding of each other's problems are essential.

REGULATIONS

Many states have regulations that attempt to reduce the hazard of insecticide applications to bees. These are based on the safest timing and bloom conditions for given chemicals on given crops.

Note: Some of the listed pesticides have been discontinued and are no longer available or legal to use.

REDUCTION OF BEE POISONING

Following are some of the ways to help reduce bee poisoning:

What the Pesticide Applicator Can Do

- Do not apply insecticides that are toxic to bees on crops in bloom, including cover crops in orchards and adjacent crops or interplants. With aerial application, do not turn the aircraft or transport materials back and forth across blossoming fields. Ground application is generally less hazardous than aerial application because less drift of the pesticides occurs, and smaller acreages are treated at one time.
- Apply certain chemicals only in late evening, night, or early morning while bees are not actively foraging (generally between 6 p.m. and 7 a.m. in the north and 8:30 p.m. to 4 a.m. in the south). Evening

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applications are generally less hazardous to bees than early morning applications. When high temperatures cause bees to start foraging earlier or continue later than usual (5:30 a.m. to 8:00 p.m.) shift time accordingly.

- Do not apply insecticides when temperatures are expected to be unusually low following treatment or on nights when dews occur. Residues will remain toxic to bees for a much longer time under such conditions.
- Do not dump unused dusts or sprays where they might become a bee poisoning hazard. Sometimes bees collect any type of fine dust material when pollen is not readily available. Under such conditions, they may actually carry pesticide dusts back to the colony.
- Use insecticides that are relatively non-hazardous to bees whenever such choices are consistent with other pest control considerations.
- Choose the less hazardous insecticide formulations. Our tests have consistently indicated dusts are more hazardous than sprays of the same insecticide. Emulsifiable (liquid) formulations usually have a shorter residual toxicity to bees than do wettable powders. Granular formulations are low in hazard to bees.
- Contact and ask the beekeeper to remove colonies from the area (or keep the bees confined during the application period) before applying hazardous pesticides when such measures are feasible and of value.
- When roadside and other weed control operations involve 2,4-D and similar compounds on blooming plants, select the formulations or derivatives known to be least harmful to bees. Our tests have shown that at maximum dosage, alkanolamine salts and isopropyl esters are more toxic than other forms. Oily formulations seem to be more hazardous to bees. Spraying in late afternoon or evening will also lessen the

hazard, since bees will not visit the blooms after they become curled. The only highly toxic herbicides are arsenicals and DNOSBP.

- Observe State Department of Agriculture regulations aimed at reducing bee poisoning.

What the Grower Can Do

- Mow or beat down orchard cover crops before applying sprays hazardous to bees. Treatment with 2,4-D is the best way to remove dandelion blooms. This is especially important in relation to the first cover spray on apples, applied during a critical foraging period when bees will fly several miles to obtain pollen and nectar from even a few blooms of dandelion, or mustard.
- Blossom-thinning sprays have not been hazardous to bees in Washington orchards. However, Sevin used as a fruit thinner can be hazardous if cover crop blooms become contaminated.
- Learn the pollination requirements of the crops you raise. Such information is not generally known for some insect-pollinated crops, such as lima beans. Application of insecticides hazardous to bees on these crops, or driving beekeepers out of your area by the use of insecticides on other blossoming crops will likely cause poor yields.
- When insect pests have been damaging a crop every season, use a preventive program of early season application before pest population increases, foliage growth, and weather conditions reduce the effectiveness of insecticides. Such a program is usually less dangerous to pollinating bees and other beneficial insects as well.
- Learn about the beekeeper's problems with chemical poisoning and enter into mutually advantageous agreements to best produce bee-pollinated crops.



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Honey Recipes

A nice touch for Valentines Day

Chocolate Peanut Butter Honey Balls

1 cup Honey

- 1 cup peanut butter (cream or nut)
- 2 cup powdered milk
- 1 cup melted chocolate
- 1 cup confectioners' sugar
- 1 1/2 cups chopped walnuts (any nut will do)

Mix honey, peanut butter, and powdered milk Together to form very thick mixture. Roll out into small balls about the size of a walnut. Roll in confectioner's sugar. Dip in melted chocolate. Roll in chopped nuts. Place on wax paper and Refrigerate until set.

Baked Yams with Lime and Honey

Ingredients

- 3 yams, about 4 lbs.
- 1/2 cup water
- 6 Tablespoons honey
- 4 Tablespoons unsalted butter, room temperature
- Juice of 4 limes
- 1-1/2 teaspoon salt
- 1/2 teaspoon freshly ground black pepper

Directions

Preheat oven to 350'f. Wash yams and place in a baking dish with the water. Bake until yams are soft when a fork and skins are puffy, about 1-1/2 hours. Set aside to cool slightly. (Leave oven on) When yams are cool enough to handle, peel and place in a medium baking dish. Add honey, butter, lime juice, salt and pepper. Stir and mash well with a potato masher. Cover with foil and return to oven for 15 to 20 minutes longer, until heated through.

Note: Honey should not be fed to infants under one year of age.



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Branch Club Dates

Central Jersey

Essex County

Jersey Cape

Morris County

Third Thursday, 7:00 PM Cape May County Extension

March 14 Lecture program at Chester Library

April 19 Spring hive inspection

May 16 Lecture program at Chester Library

June 21 MCBA Summer picnic

July 25, 26, 27 Participation in Morris County Fair

Sept. 13 Fall hive inspection

Oct. 17 Lecture program at Chester Library

Dec. 7 Holiday party at the Lamplighter Inn

Third Friday, 678 S. Maple Ave. Glen Rock

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North West

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