

How Do Honey Bees Survive the Winter?

Unlike other insects that go dormant during Nebraska's cold winter, honey bees stay active in their hives even when temperatures are below zero. How do they do this?

The temperature in a properly managed hive never falls below 63° F. To maintain this temperature, worker bees form a tight cluster and surround the queen bee. By using stored honey as fuel, the workers shiver to generate metabolic heat. The bees on the outside of the cluster, insulate the cluster while the innermost bees generate heat. They continually rotate their position, alternating their role as a heat producer and heat retainer.

It isn't unusual for a bee hive to lose two-thirds of its population between late summer and the following spring,



Insulating hives reduces honey consumption.

but the beekeeper's goal is to keep the queen and some bees alive and healthy until temperatures warm in the spring. A strong honey bee hive needs at least 55-60 pounds of honey at the beginning of winter.

Beekeepers usually check their hives in March to make sure there are adequate food reserves to last until mid-April.

Another management

technique that will reduce honey consumption is for beekeepers to place a winter wrap around each hive in November (see photo) and remove the wraps in mid-April.

If you are interested in keeping bees, but don't exactly know where to start, come to a Beginning Beekeeping Workshop on Saturday, March 12 (information at right). (BPO)

Ultrasonic Pest Repellents Are Not Effective

A number of ultrasonic repellents have been marketed to customers who want a safer and easier way to control pests around the home. Ultrasonic repellents have existed for more than 25 years and are marketed through mail-order companies, home shopping cable channels and gardening magazines. They are readily being sold on the Internet and at hardware and other stores.

Ultrasonic devices claim to use ultra-high frequency sound waves to chase away pests from rodents to spiders. Some research shows ultrasonic devices can affect wild rodents in field situations and their travel routes.

However, intensive research and evaluation from vertebrate pest specialists and research labs do not support the use of ultrasonic devices as an effective method to eliminate or prevent pests.

One debunking study involved 20 ultrasonic units of

different brands. The researcher used these units against rats and mice in indoor and outdoor pens and in field trials. The overall result was nothing more than a partial repellence for a day or so which was soon overcome, regardless of whether or not the frequency was variable, random or intermittent. Some units produced no noticeable



Other methods, such as traps, are more effective at pest control than ultrasonic devices.

effect on the rodents at all.

There are plenty

of non-toxic or low-toxic methods to keep pests outside. For mouse control, seal cracks

and crevices larger than one-fourth inch. Eliminate weedy growth or vegetation near the house, where mice usually live.

Lastly, use snap traps inside the house at the earliest sign of mice. A particularly effective bait is a bit of softened caramel (yes, candy) pressed into the "trigger" of the snap trap. Caramel is highly attractive and cannot be licked off by mice. It also stays fresh for a long time. Live traps can be used, with or without bait — they work because of mouse behavior. Glue boards can also be used, but they must be thrown away after catching a mouse.

Researchers have found ultrasonic devices are not effective for controlling insect pests, either.

Other methods take a bit more time and effort than plugging in an ineffective device, but remember, if it seems too good to be true, it probably isn't true. (BPO)



Nominations are Being Sought for the 2005 Lincoln-Lancaster County Environmental Awards

Do you know of an individual, business, community group, school or youth group who deserves to be recognized for their environmental stewardship efforts? If so, nominate them for a Lincoln-Lancaster County Environmental Award.

Awards are given in the following categories:

Pollution Prevention

Preventing pollution and waste from being created.

Waste Reduction and Recycling

Reduction in the amount of waste sent to the landfill.

Water Conservation

Reduction in water use,

using water conservation techniques.

Cleanup/Beautification

Improvement in an area's visual quality.

Residential/Commercial Development

Reducing waste during construction, using drought tolerant landscaping, energy efficient or green building techniques.

Environmental Education/Awareness

New or unique efforts for providing or supporting environmental education programs; increasing awareness about local environmental issues.

Nominations may be made in more than one category if appropriate. Deadline for nominations is March 18.

To nominate someone, call Harry Heafer at 441-8035 or Gene Hanlon at 441-7043 for a nomination form. Or, complete the nomination form online at: www.ci.lincoln.ne.us/city/health/enviro/kllcb/awards.htm.

The Lincoln-Lancaster County Environmental Awards are co-sponsored by the Lincoln-Lancaster County Health Department and Lincoln Public Works and Utilities Department with generous support from many donors. (BPO)

Beginning Beekeeping Workshop

Learn to:

- manage honey bees by understanding their biology and behavior
- identify the best Nebraska honey plants
- install packaged bees
- manage honey bee diseases
- harvest honey and beeswax
- prepare your crop for market
- locate hives for best survival and production



Saturday, March 12, 9 a.m.–5 p.m.

Lancaster Extension Education Center,
444 Cherrycreek Road, Lincoln

Saturday, April 9, 9 a.m.–3 p.m.

Apiculture lab, Agricultural Research and Development Center (ARDC), near Mead

Cost: \$15 per family — includes refreshments and a workbook for new beekeepers. One lunch is included in the registration. Lunch for each additional family member is \$8.

For more information, call Barb Ogg at 441-7180

Upcoming Workshop

Everything Homeowners Need to Know About TERMITE CONTROL

THURSDAY, MAY 19, 6:30–9:30 P.M.

Lancaster Extension Education Center,
444 Cherrycreek Road, Lincoln

Attendees will:

- Learn to identify termites and their damage
- Learn unbiased information about effective treatments, based on research results
- Learn why treatments cost so much
- Receive up-to-date reference materials
- Be informed consumers and make better decisions

Cost: \$25

Call 441-7180 for more information



ewf needs volunteers

Volunteers are needed for earth wellness festival on Thursday, March 24 at Southeast Community College in Lincoln. Approximately 3,000 fifth-graders participate in this annual event that involves students in creative and innovative environmental education activities.

Each year, over 250 volunteers take part in earth wellness festival activities. As classroom escorts, bus greeters, presenter and registration assistants; volunteers are essential to the success of this event. You may choose to volunteer all day (8:30 a.m.-3:30 p.m.) or morning only (8:30 a.m.-noon). In return, you receive a festival T-shirt, a free lunch, an invitation to our celebration party following the event and an opportunity to participate in a rewarding volunteer experience.

Please contact Meghan Sittler at 472-8823 or via e-mail at msittler2@unlnotes.edu for more information. (DS)

