STORING HONEY

One of the finest foods we can store for survival is pure, raw local honey. Honey stored under proper conditions will last for years, and can be used for cooking, canning, and general health maintenance. But the secret to success is in those first two sentences.

The honey normally sold in stores is NOT pure, raw honey. It is blended, heated, and generally not of origin in this country, let alone local. America is one of the few countries in the world where most honey is sold in liquid form. Note that honey is sold by weight (avoirdupois), and not by volume (pints, quarts, etc). To attain and maintain that liquid state for a long shelf life in retail stores, honey must be heated to 181 F for 24 hours, which destroys most of the inherent good qualities of honey. Indeed, the heating produces the chemical hydroxymethyfurfural (HMF), which in Europe is considered an unwanted adulterant, and heated American honey is therefore illegal to sell in Europe due to their pure food laws (Dr. Roger Morse, "Gleanings in Bee Culture," March, 1985).

It has been said that "honey is honey, as long as it has FDA approval, so you might as well buy it from a discount store." Nothing could be further from the truth. The Clinton Administration allowed the importation of Chinese "honey" as early as 1992, which sold for $0.25 per pound, wholesale. Studies in Canada found that Chinese "honey" was at least 40% corn syrup, contained carmel coloring, and Canada joined Europe in banning its importation.

Charles Mraz reported ("Gleanings," Dec. 1978) that unfiltered, unheated honey contains active glucose oxidase which supplies oxygen to the digestive tract. Such natural honey is reputed to prevent botulism poisoning, relieve constipation and prevent congestion in the intestinal tract...and that heating and pressure filtering will destroy and/or remove the valuable enzymes in the honey.

Studies since 1978 have shown that pure, raw local honey is excellent in the prevention and cure of various allergies, as it contains minute trace amounts of pollen and mold spores, and acts as a homeopathic medicine. One allergy clinic in Iowa (employing 22 physicians!) uses pure, raw local honey in its treatments, and arranges for their patients to obtain local honey, which they defined as being obtained from floral sources within 5 miles of the patient's home.

As most honey in North America is obtained in June and July, now is the time to find a local beekeeper and arrange to purchase honey packaged to your specifications, if possible. Your local county extension service should be able to provide you with a contact telephone number for the county bee association. There you should be able to find a beekeeper who meets the qualifications, and who could extract, filter and package honey for you this summer.

Most small scale beekeepers (less than 24 hives) remove the honey supers from the hives and extract it the same day at hive temperature (about 94 F), as the viscosity of honey at that temperature allows easy extraction through centrifugal force. Ideally, you would want them to then filter the honey through a fine grade nylon filter (paint filter) immediately, and pour it into two (2) gallon food grade buckets you provide. Expect to pay slightly more for such service than you would for Chinese honey, but the expense is certainly justified.

Raw honey as described in the paragraph above can be expected to granulate or crystallize rapidly, the actual rate depending upon the floral source - (for my area) maple (April, May) takes 2 months or more, blackberry (June, July) may granulate in 2 weeks, while fall honey (wildflower/herbal mix) takes about a month to granulate. Mid season honeys are generally preferred for quality. Honey granulates quickest at 57 F, and slower at temperatures above or below 57 F. Proper storage, then, would be at temperatures as close to 57 F as possible, but cooler is preferred over hotter; basement storage is excellent.

Granulated honey is normal. By law, honey is sold by the pound, not by avoirdupois liquid measurements You can purchase 3 pounds of honey, but not a quart of honey. The reason for the weight measurement in poundage is very ancient. In England, heather honey will gel extremely fast - right in the comb - and could not be extracted by any methods then available. So honey was traditionally sold as a solid block of honey and wax, by the pound, and the weight measurement laws have remained intact for hundreds of years.

To liquefy the honey for normal use, the honey must be heated slowly in a double boiler to 145 F until clear, and then cooled quickly to preserve quality by circulating cold water in the double-boiler. Just be sure to have a wire rack, a circle cut from expanded metal, or something similar, on the bottom of the stock pot or container used for the double boiler, so that water may circulate under the bottom of the honey bucket. And always loosen the lid of any honey being liquefied, as it gains considerably in volume as it is being heated - it ***will*** burst a container!

If honey is stored in glass containers, the water in the double-boiler must be high enough to cover the top of the honey in the container!!! The honey must be able to expand upwards into the neck of the container, or the bottom of the container will be broken right off, ruining a lot of good honey. Trust me. I've done it. A gallon of honey is about 13 pounds, and that is a lot of good honey to waste!

It is much easier to liquefy 20 pounds of honey in a two gallon plastic bucket than it is to liquefy 50 pounds of honey in a five gallon bucket not only because of the weight, but also because the water surrounding the honey container in the double-boiler (large stock pot) must be as high as the honey inside the bucket. Honey really expands as it liquefies, and the bottom of the bucket can be split if the honey at the top of the bucket is still granulated solid.

The cautions in the last two paragraphs came from hard won experience, and you do not need to replicate my mistakes. Beekeepers have enough problems and don't need to waste honey.