

Master Beekeeper Certification Course: Category #9

By: Louis A. Matej

Date: 5 December 2005

Name: Preparation and scoring (judging) honey, wax, mead, products, cooked using honey, Assoc. exhibits and innovations (includes gadgets). The equipment necessary for accurate judging to be described and several items demonstrated. Win a prize in at least one contest.

Subject: My experience as Division Coordinator for the Western Washington Fair Honey Show for the past 10 years, including gathering volunteers and workers, categorizing incoming exhibits, judging, recording, displaying (with ribbons), and overseeing the maintenance of the honey booth throughout the 17 days of the fair.

PROPOSAL

1. Discuss long-term preparations for the honey show.
2. How a honey show booth is equipped and maintained for the duration of the fair.
3. Gathering exhibits, judging, awarding ribbons, recording and displaying.
4. What happens after the fair?
5. Awards I have won at the fair before I became Division Coordinator of the Honey Show.

REFERENCES

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ABSTRACT

Preparation and scoring (judging) honey, wax, mead, products, cooked using honey, Assoc. exhibits and innovations (includes gadgets). The equipment necessary for accurate judging to be described and several items demonstrated. Win a prize in at least one contest.

For the past 10 years I have been the Division Coordinator of the Honey Show at the Western Washington Fair in Puyallup, WA. During that time I have had much experience in all aspects of honey show presentations including the organization of the honey show booth, gathering and categorizing exhibits, judging, displaying, and maintaining the booth throughout the duration of the fair.

Preparations for the fair begin many months before the fair opens. The busiest time is during the gathering of the exhibits because the building of the booth displays are done at the same time.

Judging is accomplished the day before the fair opens so all the exhibits must be categorized and displayed the night before.

The entire Honey Show involves the coordination of many volunteers and workers. Without these dedicated people a honey show booth cannot function and be maintained.

In this paper I will attempt to give a presentation of all the aspects involved with the coordination of a State Fair Honey Show.

Master Beekeeper Certification Course: Category #9

By: Louis A. Matej (Coordinator, Western Washington Fair Honey Show)

Pierce County Beekeepers Association

Date: 25 August 2005

Category: Preparation and scoring (judging) honey, wax, mead, products, cooked using honey, Assoc. exhibits and innovations (includes gadgets). The equipment necessary for accurate judging to be described and several items demonstrated. Win a prize in at least one contest

My experience as Coordinator for the Western Washington Fair Honey Show for the past 10 years, including gathering volunteers and workers, categorizing incoming exhibits, judging, recording, displaying (with ribbons), and overseeing the maintenance of the honey booth throughout the 17 days of the fair.

Discuss Long Term Preparations for the Honey Show

Preparations for the Honey Show for next year at the WWash. fair level begins right after the end of the previous Honey Show. Items must be taken down and stored. One of the most important things to do is to evaluate how our show went and what could be done to improve it for next year. At our next beekeepers board meeting we evaluate and make possible improvements.

Since our Honey Show begins the first week of September, in January I contact the National Honey Board (NHB) to obtain new items for the show. The NHB has been very helpful in providing boxes of material such as recipe pamphlets, instructional printings, children's bee art, and even seeds for honey producing plants. They usually send me a box or two of hundreds of these items to be given out to the general public.

It is about this same time of year that I begin to contact the beekeeping associations in Western Washington to get them motivated to help out at the fair. Since the Pierce County Beekeepers are located in Puyallup, WA where the fair is located, we usually do the bulk of the work. However, we do get help from the Puget Sound Beekeepers (Seattle, WA), Olympia Beekeepers Assn. and some members from other associations. At this time I also send a notice to all associations in the state motivating them to have their members enter beekeeping items for exhibits.

In February and March we begin to discuss what items we need to purchase for the displays at the fair and other props we will be using. This year (2005) we decided we would buy new pictures and instruction posters as well as some educational material to display on the wall behind the bee booth. We also decided we would try having a continuous playing video on beekeeping. Since we were moved to a very new building, we also obtained new observation hives and display cases.

In April I create a volunteer sign-up sheet. We usually would like at least 2 people to man the booth per shift. There are 3 four hour shifts per day and we need this for 17 days. So you can see we need at a very minimum about 102 people just to man the booth. We prefer many more

people and so start early in signing them up. It takes many months to gather all the volunteers needed.

Also, in April the fair association sends me a draft copy of the Agricultural Premium List, which contains the rules and regulations involved with entering, categorizing, judging, and awarding ribbons for all the beekeeping exhibits. I must make all the date changes on the List as well as any rule changes. At this time I sometimes add a new category or change a previous category.

For example: In the past we never had an association exhibit other than from the Pierce County Association. I wanted to expand this category to give individual beekeepers the opportunity to enter their own educational or artistic bee exhibits. Since this change we have received a number of very good individual beekeeping exhibits which portray some aspect of the beekeeping industry. Another example is the addition of Honey Mustard and the 3 types of mead. These items were not on the list previously and every year we would get a number of these exhibits and put them in the "Other" category. So a few years ago I added these categories specifically. After I make all the necessary changes and/or additions to the Agricultural Premium List, I send it back to the fair association for printing. This list goes out to all the public interested in providing exhibits to the judged at the fair.

In May, June and July I usually attend meetings at the fair to get all the information needed so our association and volunteers can run the booth properly. At this time I send of names to the fair of beekeepers who will be helping to maintain the booth throughout the duration of the fair. Each one of these beekeepers will obtain a photo ID pass to the fair so they will be able to go in and out without paying. The most important person is the beekeeper responsible for the lives bees needed to maintain our observation hives for the duration of the fair. I will describe their duties later in this paper.

The most important meeting we have is the August meeting. Our association usually has this meeting the last Monday of the month instead of our usually 1st Monday since it is right before the fair and we concentrate on all final preparations of the fair. We finalize our volunteer roster, announce our work party date and time, gather final props, give out free entry and parking tickets to volunteers (some are send through the mail), and go over the Agricultural Premium List rules and regulations for those who have never entered items in the fair. We also demonstrate some of the aspects of a good exhibit in order to improve quality and winning of ribbons.

Our last preparation for the Honey Show fair booth is the work party where the actual booth and props are set up. This usually occurs 3 days before the fair opens to give us time for any final improvements, solving of last minute problems, and put the finishing touches on the booth.

How a Honey Show booth is equipped and maintained for the duration of the fair

Displays:

The most important thing to do when setting up a display for a honey show is to concentrate on the benefits, education, and joy of beekeeping. There will be thousands of people visiting the booth in the short 17 days of the fair show and it is important to impressed them with all that the

honey industry is providing, not only in the way of pollination, but also in the products, education and fun of beekeeping.

Even though we start planning and working on items for the fair, we have on big work party just prior to the fair to put the finishing touches on the displays. Previous to this the booth area

Our booth is set up to have many pictures of bees, beekeepers, and the products of the beekeeping industry. The back of our booth is covered with posters, beekeeping articles, photographs, art and displays of equipment. We cover the tables with old beekeeping journals for the public to view and even take home. We also provide them with literature about local beekeeping associations they can join and/or from whom they can take classes to learn more and possibly set up a hive of their own. Our clean lighted cabinets contain all the products of beekeeping as well as those made using bee products.

The biggest eye catcher in our booth, especially to the children, are the 2 observation hives. Each hive contains on deep super, bees, marked queen, honey, brood, and pollen. It is also good to have a few drones running around so the public can see all 3 types of bees.

Maintenance:

The maintenance of the beekeeping booth and exhibits is extremely important since it involves many helpers and volunteers. Once the booth is set up, the judging is complete, the exhibits displayed with ribbons and the literature is available, the maintenance involves a core group of beekeepers who will make sure: 1. The volunteers show up on time. If a volunteer has an emergency and can't make his/her shift, a substitute system must be in place. 2. Enough literature must be kept available. 3. The bees in the observation hive must be changed regularly, fed, watered, and kept from chilling if kept overnight. 4. The exhibits and props must be kept in good condition. If the ribbons, pictures, or posters fall off, they must be restored. It's important to keep the booth clean and neat. 5. Contact with the public must be ongoing. We usually stamp the hands of the children with bee figures. The most important thing is to give to the public a good understanding of the benefits and joy of beekeeping not only from a commercial operation standpoint but also as a hobby for an ordinary person of any age or sex. 6. The booth volunteers must keep in contact with the fair staff in order to solve any problems that might occur during the honey show.

Gathering Exhibits, Judging, Recording, Awarding Ribbons and Displaying

Gathering Exhibits:

We allow two whole days for people to bring in exhibits for the honey show. Using the Agricultural Premium List listings we break down the exhibits by category into classes. It is important to label each exhibit with a number only. The number is connected to the exhibitor. The judge only sees the number and is kept from seeing the name of the beekeeper. After judging is complete the scores are compared within each class and a 1st, 2nd or 3rd place is awarded for each. A 1st place is not always given within a class if the score of all exhibits are not high enough. For example: If no entry within a class does not exceed 90 out of a possible 100 points, no 1st place ribbon is given. On the other hand if there are many entries within a class, multiple 1st, 2nd, or 3rd place ribbons can be given.

Category: Individual Beekeeping Exhibit

After a few years of seeing beekeepers bring in many displays, photographs, equipment, and art, I decided that we should have an individual beekeeping exhibit category that will not only allow them to display or show their work but also provide the public with education and unique examples of joys of the beekeeping industry. It would also give us more items to display at the booth.

The 2 classes for the Individual Beekeeping Exhibit are:

1. Education
2. Beekeeping Art.

Since both classes usually contain elements of both education and art (although one usually stressed) criteria for judging each is the same.

Judging: Individual Beekeeping Exhibit

Each exhibit is judged separately stressing the overall quality of the exhibit (30 points). Points are given for both the educational value and the quality of art (25 points each). And the exhibit must be attractive (20 points). You can tell from each exhibit how much work went into it and how much care was involved in putting it together. These are taken under consideration when judging this category.

Category: Gadget Exhibit

This is a unique category in the honey show. It is open to any item which a beekeeper has constructed or made which contributed to the beekeeping industry. It can vary widely in its structure and use. It can be a large item such as a unique extractor or piece of equipment and as small as a uniquely made hive tool.

Judging: Gadget Exhibit

The most important criteria for judging a Gadget used in beekeeping is the *practicality* of the exhibit. Does it contribute to the overall management of the bees, education of the practice of beekeeping or the processing of beekeeping products? If it is too bulky or too cumbersome for practical use by the average or commercial beekeeper then it wouldn't be something people would want to use on a regular basis. On the other hand, if it contributes to making beekeeping more pleasant and easy then it would be something to be used more. Since this criteria of judging is so imperative for any gadget used in beekeeping, 50 points maximum is awarded. Some of the things beekeepers want to know about any gadget is what is it made of, how is it put together, what does it do, and how will this make my beekeeping experience better? For this purpose the judge requires that every gadget exhibit be accompanied by a typed or printed explanation of the gadget. It may also provide beekeepers with information on how to reproduce it. A maximum of 25 points is awarded for the *explanatory text* accompanying a gadget exhibit. Along the same line, how easy can this gadget be reproduced? Can the average beekeeper make this gadget? If it is a very difficultly made gadget, it will not easily be available to most beekeepers unless it finally makes its way into production by large manufacturing companies. However, if it is easily reproduced, assuming it is a practical gadget, then it will be more available to the average beekeeper. 15 points is given for the *ease of reproduction* of the gadget. Lastly, how will this gadget contribute to the overall beekeeping experience or industry? Does it induce in others more interest in beekeeping or does it help in a specific area of beekeeping which needs improvement? The judge will give 10 points for the gadget's overall *contribution to beekeeping*.

Category: Beeswax

Beeswax is a very important part of the beekeeping industry. Not only is it used to provide the beekeeper with foundation for building up good strong combs, it is also very attractive when used in candles and art. We really want exhibitors to use their own skills in their entries so we do not allow candles made from foundation. It is extremely important that the person receiving the beeswax exhibit does not handle it with bare hands or even touch the wax surfaces. Fingerprints and worn areas on beeswax will decrease its quality. Each item must be handled carefully to prevent its quality from being decreased before, during and after judging.

Judging: Beeswax

There are 6 classes within this category.

1. Unbleached, natural, single block, pure beeswax (not less than 1 pound)
2. Candles, dipped, pure beeswax (one pair)
3. Candles, molded, pure beeswax (one pair)
4. Candles, fancy, pure beeswax (one pair)
5. Candles, novelty, must contain beeswax, (three assorted)
6. Beeswax novelty item (4 oz. beeswax minimum)

The most important thing to consider when judging beeswax is how clean it is. The color of beeswax is important in determining how the beeswax was processed and how much care was put into producing a clean product. Some use bleaching and others do not. Is the beeswax discolored due to honey, propolis or pollen? When bees travel over combs over a period of time the beeswax darkens. Usually the cappings obtained during honey extraction provide the cleanest beeswax. *Cleanliness, freedom from impurities* (25 points). The color of beeswax is also an important consideration. Is the beeswax too bleached or is it too dark which means it contains substances other than beeswax? And does the beeswax smell like beeswax? Can you smell something else used in the cleaning or bleaching process? *Color and Aroma* (25 points).

Before beeswax is solidified while making a candle, block or novelty item, it must uniform in color. If one part of the item is darker than another part, points must be subtracted. Also, if an exhibit is not shaped properly or appears worn from handling, it is of less quality. *Uniformity of appearance* (20 points). During the solidification process beeswax changes in volume. The beekeeper must take this under consideration in the making of molded items. Cracking may occur as a result of this process. *Freedom from cracking and shrinking* (15 points). Is the beeswax item unique? Did the beekeeper use imagination in making or molding the item? *Creativity* (15 points).

Category: Honey Cooking

Honey Cooking is a very big part of the beekeeping honey show. Many people who do not or cannot keep bees have a chance to enter items in the show. We require that at least 50% of the sweetening of an exhibit must be from the use of honey. It is important when accepting baked or cooked items to be judged that they be kept in the same display form as received. For example: Some people bring in bread in plain plastic bags while others display them on covered decorated plates. Each exhibit is to be accompanied with 3 identical 3x5 recipe cards. This will allow not only the judge to see the ingredients but also provide the public with the instructions for making the exhibit themselves.

Honey Cooking are divided into 2 subcategories: Baked Items and Candy/Mustard. Each subcategory has it's own number of classes and judging criteria.

Judging: Honey Cooking (Subcategory: Baked Goods---Classes 1-5)

1. Cookies or Bars (9)
2. Cake, unfrosted or frosted (1)
3. Yeast Bread (1) or Yeast Rolls (9)
4. Quick Bread (1) or Muffins (9)
5. Pie, the rules apply to the filling (1)

Since Classes 1 through 5 require baking and generally are judged similarly, we use the same criteria for each. *Flavor* is the most important so we give a maximum of 35 points for this. Texture, grain, moisture and uniformity of color get a maximum of 30 points. Each class has different requirements for these. For example: Sometimes a yeast bread is too dry or a quick bread is too moist. The *texture* of pie crust can differ greatly and some parts of it might be darker than other parts do to uneven heat distribution. A maximum of 20 points is given for *general appearance and display*. Some breads are displayed on decorated plates while others are wrapped in ordinary plastic bread bags. Some honey cookies are arranged on a plate with ribbons while others are just stacked on top of each other. Appearance is important because before the item is tasted, points are awarded or discounted for creativity and care in presenting the item. Lastly, 15 points are awarded to an exhibit which has the correct *lightness* for it's class. For example: Is the pie filling too soggy? Are the cookies too hard and brittle? Is the yeast bread fluffy and fresh or is it heavy and too moist?

Judging: Honey Cooking (Subcategory: Candy/Mustard---Classes 6-8)

6. Honey Candy (1/2 pound or 12 pieces)
7. Honey Mustard (two 4 oz. containers)
8. Other

Honey Candy and Honey Mustard can be judged very similarly depending on the categories chosen for scoring. Again, *flavor* is the most important criteria for a good candy or a good mustard getting a maximum of 35 points. In the case of candy is this exhibit something you would enjoy eating over and over again or is it something you do like after the first bite? Mustards can vary greatly in taste. What constitutes a good tasting mustard? Are the spices used balanced properly or is there a off tasting component? Is a hot mustard too hot or not hot enough? *Texture* is also important when judging candies and mustards. A maximum of 25 points is given for this category. Is the candy pleasant to eat? Is it too hard or too sticky or just right? I have seen mustards which have a watery texture and others which are smooth in texture. *Attractiveness* and *Handling* quality each get a maximum of 20 points. I have added one more class to this portion of Honey Cooking called "other" because we sometimes get exhibits which do not meet any of the other classes. Exhibits in this class can be bottled chutney or hot or mild chipolte sauce. We even have received exhibits of Apple Butter in this class. Honey is used in all of these as the main sweetener.

Category: Honey Exhibits

Over the past 8 years I have watched the judges very closely in their handling of the honey exhibits. They spend a lot of time and energy analyzing each honey exhibit very meticulously using a number of different criteria as well as the use of instruments to better judge the quality, uniformity, and care in presenting them. For two years following these 10 years I was able to be one of the judges of these items. Since I have been the coordinator of the honey show at the fair for about 12 years now, I have since designated other qualified experienced beekeepers to help in the judging in order to give them the chance to become proficient in judging honey products.

The Honey Exhibits section of the show is divided into 5 subcategories: 1. Liquid Honey 2. Comb Honey 3. Bulk Honey Frame 4. Creamed (Finely Granulated) Honey and 5. Chunk Honey. Comb Honey and Bulk Honey Frames are judged the same using the same criteria but the scoring of the other subcategories are judged using different criteria. Each subcategory has its own number of classes.

Judging: Honey Exhibits (Subcategory: Liquid Honey---Classes 1-7)

Liquid Honey is put into a specified class simply by its color. The color of honey is totally dependent on the nectar gathered by the bees. Some flower nectar results in a very light honey almost as clear as water. Other nectar gives a very very dark honey, almost so dark that you cannot see through it. Since this difference is a natural occurrence in nature, the judge does not take off points for color even if he prefers one color over the next. Color is the only criteria used to categorize samples into classes of honey. As liquid honey exhibit are entered, we compare them to the colors on a color grader disk to determine the class. Only glass Queenline jars of liquid honey are accepted; all other containers cannot be used. Three jars of honey are required.

Classes of Liquid Honey:

1. Water White Honey
2. Extra White Honey
3. White Honey
4. Extra Light Amber Honey
5. Light Amber Honey
6. Amber Honey
7. Dark Amber Honey

Each sample of honey is checked for *moisture content* using a Refractometer. This device measures the specific gravity (or the total solids content) of the honey using a metered prism. A drop of honey is placed on the refractometer prism and after providing enough light the percentage of water in the honey can be read off the chart seen through the opening. A honey sample containing more than 18.6% water content is disqualified. Honey containing the amount of water will ferment over a period of time. 15 points is given for a qualifying water content. The honey is then placed in a light box. This box allows the judge to see very clearly every particle, crystal and bubble in the honey as well as anything else that may be seen in the honey. This is why a glass Queenline jar is used because it allows a clear view of the contents. A maximum of 10 points is awarded to a sample which shows *freedom from crystals*. Sometimes entries which do not look crystallized just looking at them will still contain very fine crystals caused from sitting too long or temperature variations. Points are taken off if crystals are seen. A maximum of 10 points is also awarded for *the absence of bubbles or foam*. Some small bubbles which are not visible to the naked eyes can be seen through the light box. Foam sometimes settles at the top of the honey and must be removed by the beekeeper prior to entry. Usually you can tell when a honey sample has been just bottled for judging because the beekeeper did not give the honey time to settle out the bubbles and foam. The honey exhibits must also be clean. 15 points is awarded for *cleanliness* which is compromised if there are pollen granules, wax particles, dirt, bee parts or anything objectionable present in the honey. The *containers* must also be glass Queenline jars. They must be clean, neat and uniform. 10 points is awarded for containers. Points are taken off if there are fingerprints, dirt, or anything objectionable on the outside of the containers. Those receiving the exhibits are very careful not to touch the glass jars with their fingers. Personally I handle all exhibits very carefully and move them only when necessary only doing so by the lids. Usually honey without any

objectionable particles or honey which has not been tampered with by additions of syrup or other substances will display a very bright appearance. 10 points is awarded for *brightness* of the honey. Sometimes a beekeeper will fill his or her 3 jars of honey from different batches of honey. Or they will start filling the jars from one batch and finish using another batch. Sometimes this causes one part of the honey to look darker or lighter or different in some way within the same jar and different between the 3 jars. *Uniformity* of appearance of the honey is important and a maximum of 10 points is awarded for perfect uniformity. Lastly, the *flavor* of the honey is judged. The judge must be very careful not to take off points if one honey just tastes different from another honey. Honey naturally takes on its flavor from the flower the nectar is gathered from. So naturally different honeys even in the same class will not always taste the same. What the judge looks for is any objectionable taste derived from the processing of honey or managing of the bees. These objectionable flavors can be due to overheating the honey from which a burnt taste may be present. Other objectionable tastes can be detected from the overuse of substances which are absorbed by the honey, such as pesticides or the use of naphthalene instead of para-dichlorobenzene when storing supers. Para-dichlorobenzene is legal for use because it is not absorbed into the wax during storage of supers, whereas naphthalene is absorbed. Naphthalene is illegal and beekeepers should not use this at all. Sometimes the judge can pick up an unknown taste that he or she is fairly sure from experience does not naturally occur in honey. 10 points maximum is awarded for flavor and points are deducted for burnt or objectionable tastes. All the honey exhibits are arranged from water white to dark amber on the display shelves with the higher scoring exhibits on the top shelf. This show cases are lighted and the honey makes for a very beautiful display of all the classes of liquid honey.

Judging: Honey Exhibits (Subcategory: Comb Honey---Classes 1-3)

Judging: Honey Exhibits (Subcategory: Bulk Honey Frame---Classes 1-2)

These 2 Subcategories are judged using the same criteria since both comb honey and bulk honey frames are different forms of the same honey product---honey still in the comb.

Comb Honey is the most natural form of honey you can have. When the bees make honey, they store it in beautiful, fresh, white wax which is built inside square or round plastic containers provided by the beekeeper in the hive. Comb honey is harvested just the way the bees have made it. No one has touch, filter, melt, extract, or process the honey. Cut comb honey is similar in that it is also honey in the comb that has been cut out by the beekeeper in square pieces. These pieces are then placed in square plastic containers or wrapped in plastic wrap.

Classes of Comb Honey:

1. Comb Honey Box
2. Comb Honey Round
3. Cut Comb Honey

Bulk Honey Frames are just that, a deep or shallow frame of fully capped honey directly from the hive. During the honey flow the bees will draw out a deep or shallow frame of foundation extremely fast. They will fill and cap these frames quickly and leave behind a frame of honey capped fully with pure white wax. Over a period of time the wax will turn yellow due to the bee traveling over the wax over and over again. It is important that the beekeeper remove the frame while the wax is still a pure white color. But the beekeeper must also make sure all the cells in the frame are fully filled and capped. So it takes a keen eye to tell when the frame is ready for exhibit. Each frame is then remove, cleaned, and stored in plastic wrap. It's

important that the beekeeper does not touch the cells or damage the cappings while removing, wrapping and transporting to the honey show.

Classes of Bulk Honey Frame:

1. Shallow Extracting Frame (Western Super Size)
2. Deep Extracting Frame

There are 7 criteria for judging Comb Honey and Bulk Honey Frames. The first is *uniformity of appearance*. Does the honey and wax look uniformly distributed? You can usually tell this by looking at the cappings closely. Are there any ridges or raised areas? If the honey and wax are completely and totally uniform a maximum of 20 points is given. Points are taken off for areas of non-uniformity. Comb honey should not contain any uncapped cells; it should be completely filled from top to bottom and side to side. In other words, there should be an *absence of uncapped cells*. I have personally seen frames of honey which are perfectly filled to the point that there aren't even any open spots on any of the sides next to the frames. A maximum of 15 points is given for comb honey which is totally filled. Points are taken off for open cells. As stated before, comb honey should have pure white cappings and there should be *uniformity in color*. 15 points is awarded for this. If there are some that have yellow travel stains, points will be deducted. Sometimes the bees bring in nectar so fast that the honey does not have enough time to cure in the cell. In other words, the bees seal the honey in the cells before enough water has been desiccated from the honey. This results in *watery cappings*. The beekeeper needs to check the comb honey to make sure there aren't any of these watery cappings present in his or her exhibit. The judge can sometimes see these as little drops of honey seeping from some of the cells. 10 points is awarded to the absence of watery cappings. When the beekeeper removes comb honey from the hive, it should be cleaned. Some of the travel stains around the outside of the plastic containers as well as the frames can be removed before presentation. The *cleanliness of the section of frame* is carefully looked at by the judge and there is a maximum of 15 points given for this criteria. Points will be taken off for any unremoved spots or discolorations. Bees also deposit pollen in honey comb, however, they usually do not deposit it in frames which are primarily used for honey since these frames are usually above and away from the brood chamber. However, there may be some bees who wish to deposit pollen even in honey supers. Also, sometimes honey will crystallize in the cells over a period of time and when temperature changes occur to promote this. The beekeeper should inspect his or her comb honey for both pollen and crystals in the cells. A good exhibit of comb honey will not contain any pollen or granulation due to crystallization and the judge will give a maximum of 10 points for the *absence of pollen and granulation*. Lastly, the weight of the comb honey must be uniform. One side of the comb cannot be filled with more honey than the other side. Also, if one side contains more uncured honey than the other side, this will cause a weight difference that can be felt by the judge. *Uniformity in weight* is an important characteristic of good comb honey and the judge will give a maximum of 10 points for this.

Judging: Honey Exhibits (Subcategory: Chunk Honey)

Chunk honey is a unique type of honey which is prized by many people throughout the world. It is simply cut comb honey put into a jar and the jar filled with extracted liquid honey. Three quart jars are required for exhibition. It is usually best to use a lighter class of honey for this in order to be able to see the comb honey better but it is not required.

In judging this class of honey some criteria for liquid honey and some from comb honey are incorporated. The first criteria is *neatness of cut* of the comb honey. It takes a very sharp knife and much care in cutting comb without destroying parts of it in the process. Is the comb honey

perfectly square and are they sharp cuts not having ragged edges? There are 20 points given for neatness of cut. Again, if the judge sees any watery cappings or unfilled cells in the comb honey, he will deduct points. Just as in the comb honey subcategory the *absence of watery cappings and unfilled cells* is essential in a good quality chunk honey exhibit. For this reason the judge will give a maximum of 20 points for this criteria. The next criteria for judging is *cleanliness*. This means there should be no travel stains on the comb honey and no wax, bubbles, wax, crystals or other particles in the liquid honey. 20 points is awarded for perfect cleanliness. Just as for comb honey, the cut comb used in chunk honey must have *uniformity of appearance*. The comb must not be filled more on one side than the other and the cappings must all be the same. The judge will give 30 points for a perfectly uniform piece of comb honey. Using the refractometer, the judge will check the density or water content of the honey and determine that it contains less than 18.6% water. Then he will taste the honey and determine if there are any objectionable flavors in the honey such as a burnt or other non-natural taste. He will then give 10 points for the liquid honey in chunk honey that has the correct *density and flavor*.

Judging: Honey Exhibits (Subcategory: Creamed or Finely Granulated Honey)

Creamed honey is liquid honey that is processed with heat while stirring to introduce small air bubbles in the honey which causes the honey to undergo fine crystallization. When done properly a very delicate smooth creamed honey will result which can be spread onto toast or used as a frosting of cakes. Sometimes, when the temperature and storage conditions of liquid honey are ideal and when the nectar used to make the honey contains unique substances and the ideal concentrations of sucrose, fructose and glucose, fine crystallization will occur naturally. This will produce finely granulated honey which is very similar to creamed honey. After bottling honey the beekeeper is sometimes pleasantly surprised to find that his or her honey has changed into this very creamy smooth honey product. 3 wide mouth jars are to be used to enter creamed honey in the fair.

Many of the criteria for judging Creamed or Finely Granulated Honey are the same as previously mentioned for other subcategories of honey so I will just mention them here: *Uniformity of the containers* (10 points), *freedom from foreign material* (15 points), *flavor and aroma* (10 points), *uniform level of fill* (1/4 inch from top of jar) (5 points) and *uniformity of the honey* (10 points). Criteria unique to this class of honey include the *absence of frosting or froth* in the exhibit. When liquid honey is heated and stirred it sometimes produced foam or froth which floats to the surface during crystallization. This must be removed or the sample heated slightly longer to allow the frosting or froth to dissipate. The judge allows 15 points for this criteria. Another unique criteria is the *firmness of the set*. Is the creamed honey too soft or too hard? This is usually a result of the temperature used in processing the liquid honey. With naturally occurring finely granulated honey this is beyond the control of the beekeeper so only samples which have a medium set can be used. But with processed honey the firmness of set can be controlled. 15 points is awarded for the correct firmness of creamed or finely granulated honey. Lastly the size of the crystals or *texture of granulation* is important since this determines how smooth the final product will be. If coarse crystals result from the processing, a granular texture will result. This usually is the texture of naturally crystallized honey in general. But when the processing or naturally occurring conditions contribute to the production of very fine crystals, a smooth product results. The judge can easily determine the texture or fineness of the crystallization by sampling some of the creamed honey. If the creamed honey has a consistency of peanut butter, he knows the crystals are very fine. If it has a granular crunchy feel then the

crystals are larger. 20 points is awarded for a smooth and fine creamed or finely granulated honey.

Category: Pollen Exhibit

There are a number of beekeepers who specialize in pollen production from the beehive. As in other specialized areas of beekeeping, pollen production requires unique equipment as well as knowledge to provide a quality product. Just as honey removal from the hive, it also involves proper management of the hives to maintain strong colonies while taking a portion of what the bees require for health and growth. Once the pollen is obtained, it has to be processed properly to maintain its quality. So when a pollen exhibit is entered in the honey show, the judge can determine if the product has been properly processed, stored and its quality maintained. Also, pollen cooking is unique in that special manipulation of recipes must be made in order to accommodate for the taste and texture of pollen.

Judging: Pollen Exhibit (Subcategory: Raw Pollen)

Three 4 oz. jars or Queenline jars are required for the exhibition of raw pollen. Pollen granules are stored on the lower back legs of the foraging bees. Because of this the granules assume a very uniform shape. Hopefully this *granule uniformity* is maintained throughout the processing of the pollen. If the pollen is too wet and not dried properly or if it is dried too much, the shape of the granules are affected. If too wet the granules will smash more easily and when dried too much they will break into smaller pieces. The judge will look at the uniformity of the granules and award a maximum of 25 points for perfect granule uniformity. One of the parts involved with raw pollen production is the elimination of unwanted items which may fall in the pollen traps. This is done by using screens and air flow and results in clean raw pollen. If done improperly or inadequately, the pollen will contain unwanted items and substances. The judge will look closely at the pollen and determine its *cleanliness* and award a maximum of 25 points for this. *Taste (absence of spoilage)* is the next criteria used in judging pollen. What the judge is mostly looking for when tasting pollen is spoilage. Since pollen is predominately made up of protein, it will deteriorate rapidly if not dried soon enough or if stored (frozen if necessary) improperly before drying. Freezing pollen prior to drying and cleaning also kills any small insects which might thrive in this protein rich substance. The judge can taste a mildew taste if it has been allowed to spoil. Spoilage also occurs if the pollen has not been dried totally and is still too moist. 25 points is awarded for the absence of spoilage. Pollen is gathered by the bees from many sources. Not all pollens contain the same amino acid content or the same color and thus various pollens are more desirable than just one variety of pollen. This provides the bees with all the essential amino acids needed to growth. A variety of pollens also provide humans with these same needed amino acids. Thus a good pollen sample should contain a variety of pollens and a variety of colors. 25 points is given to a pollen that has good color.

Judging: Pollen Exhibit (Subcategory: Pollen Cooking)

When talking about pollen cooking, it is presumed that most of the items entered in the fair are predominantly baked items. Personally I think pollen cooking is very difficult because of the nature of pollen itself. It has a pungent protein taste which needs other ingredients or sweeteners to bring the tastes into balance. So when judging a cooked item containing pollen the *flavor* of the item is very important. Is there too much of a protein taste or has the cooker blended in the proper balancing ingredients? Have he or she used enough or too much pollen for the item? 35 points is given for flavor. Pollen is also very granular and flaky which can affect the moisture of baked items. If it is put into bread, ingredients must be added to maintain

moisture or the bread will be too dry. Whatever the item cooked or baked, the consistency of pollen will affect the *texture, grain, moisture and uniformity of color*. 30 points is awarded for a balanced item using these criteria. General *appearance* of the cooked item is also judged by giving a maximum of 20 points. This criteria is used to simply ask if the item is presented good or if it appears good to eat. If the pollen used is dried properly it should be light and flaky. When used in cooking, especially in baked items, the product should be light as well. *Lightness* is given by the judge 15 points.

Category: New Apiary Product

Unlike the gadget exhibit, this category represents a new and unique concept in the use or marketing of hive products rather than items used by the beekeeping in management. Hive products for this category are defined as any bee produced or manipulated item. Examples of these are: new soaps using wax, honey or propolis, lip balms using hive products, creams or ointments, etc.

Judging: New Apiary Product

Since this involves a new product, *creativity* is important. How much imagination was put into producing this apiary product? Does it use a hive product like propolis which is not used much by the average beekeeper? What creative processing was used to make the product? 25 points is awarded for creativity. How useful is this product or what function does it provide for the beekeeper or the general public? Is it used as a health product or cleaning agent? Or is it used uniquely in art or craftsmanship? Whatever the case 25 points is awarded for its *usefulness or function*. If this new apiary product was sold to the general public would have market appeal? Would everyone want it or could everyone use it? Or if it is a specialized item such as used in art, would every artist use it or want it? 25 points is given for its *Market appeal*. Lastly, is this item *unique and new*? Or is it something already on the market or used by beekeepers. The more this item is unique the more points it will receive to a maximum of 25 points.

Category: Mead

This is a fairly new category for our Honey Show. Since so many people were entering mead we had to make it a separate category instead of placing the exhibits in the “other” class of the honey cooking category. A few years ago I decided to divide this category into 3 classes

Judging: Mead

2 bottles of mead are entered. No added sugar can be used in making mead, only honey or a mixture of honey and fruit.

Classes of Mead:

1. Mead (Dry)
2. Mead (Sweet)
3. Melomel (Fruit Mead)

I did not know how to judge mead since when it was first added as a separate category, I have not tasted enough of it to tell what were the criteria to determine what was a good mead and what was a bad mead. Since the wine club at the fair was just a couple booths down from us during our judging, I incorporated some experts in the field to help us out. With their instruction and help I was able to learn more about the qualities of a good mead. Unlike wine which is made with fruit and added sugar, mead made with honey or honey and fruit has a uniquely different taste. If I were to describe the taste I would say it is somewhere between a good beer and a

good wine but without any fizz. Like a good wine a good mead tends to be very smooth but with a unique taste all it's own. I have learned that unlike wine, it takes more years for mead to develop into a smooth product. *Taste and Aroma* is most important. In judging a number of meads, I found that those which are good do not have a bitter or yeasty taste to them. The type of honey also affects the taste and it is recommended that a full bodied light amber honey be used. My question when judging mead is whether or not I would enjoy this mead with a meal or a dessert. Or is the taste too strong or too weak? 50 points is awarded for a good tasting mead. Like some wines, meads also have to be racked in their fermentation process. If this is not done properly or not the proper number of times needed before bottling, there will be some residual dead yeast in the bottles which can be seen. If the bottle is inverted, this layer of dead yeast will cloud the mead. Not only will this affect the taste but also the *clarity and appearance* of the mead. Other substances may also cause clouding. 25 points is awarded for clarity and appearance. Lastly, the *body and aging* of the mead is judged. Some winemakers or meadmakers will add uniquely ingredients to increase the body of their product. In the case of a dry or sweet mead a full bodied honey can be used to increase the body of the mead. In the case of melomel, fruit or raisins are used to do this. If the mead is not aged in the bottle long enough before opening, smoothness will be decreased. 25 points is given for *body and aging*.

Awarding Ribbons

As you can see there is a maximum of 100 points for each class described above. Within each class scores are given for each exhibit. The exhibits with the highest score receives the 1st place blue ribbon, the next score receives the 2nd place red ribbon and the next highest score receives the light blue 3rd place ribbon. In those classes where there are many exhibits, I give more than one 1st, 2nd and 3rd place ribbon. If there are ties, I give them the same ribbon. There are 2 levels of exhibits in our show. A Novice level where the exhibitor has not entered an item before and an Open level. Exhibits in each level are compared with those in the same level only.

We give a Open Best of Show Ribbon to the 1st place exhibit which is judged to be the best when comparing all the 1st place exhibits in the open classes. We give a Novice Best of Show Ribbon to the 1st place exhibit which is judged to be the best when comparing all the 1st place exhibits in the Novice classes.

I also give out a number of Beekeeping Award Ribbons to those exhibits which I feel are unique and where a lot of care have been involved.

At our Pierce County Beekeepers Association (PCBA) in October, I award all the members present with their ribbons. The fair is responsible for getting the ribbons to the people not associated with the PCBA.

Displaying the Exhibits

Each exhibit is placed on the shelves in the display cases or in the case of art or large items on the walls or floor. I usually display the honey in increasing color with the 1st place exhibits on the top shelf and the 3rd place exhibits on the bottom shelf. With the lights in the display cases turned on the honey makes for a very beautiful display. Next I place the chunk or creamed honey next to the honey. The comb honey or honey frames are next. We usually do not get many pollen exhibits but when we do I put them just before all the wax entries. The baked items separated by class are placed together ending with the mustard entries. Lastly I put the mead exhibits at the end of the display. All the score cards, scores, names and awards are displayed with each exhibit. The entries are kept for the 17 days of the fair.

Recording

All exhibitors and all awards are recorded on the Honey Show roster provided by the Superintendent of the Agricultural Department of the fair. This usually takes time making sure all exhibits are accounted for. Monetary awards are taken care of by the fair.

What happens after the fair?

The fair ends on a Sunday. On Monday we usually have a work party to dismantle the bee booth. For me this involves gathering up all the exhibits, score sheets, and ribbons. Some beekeepers will pick up their exhibits on this day and if they are not in the PCBA, I will give them their score sheets and ribbons. If they are members of the PCBA, I will give them their exhibits but I will keep the score sheets and ribbons for presentation at the next PCBA meeting which is the 1st Monday in October. All other exhibits not picked up are kept by me and returned if possible to the beekeeper on a later date along with their score sheets and ribbons.

While this is all being done, I join with the other PCBA members in taking down the educational material and props used during the booth. This past year we also had to dismantle the back wall paneling which was constructed to allow us to put display items since the wall behind it was brick. All of the fair material had to be stored at the home of one of the beekeepers.

At the following PCBA board meeting, we conducted an evaluation of our Honey Show and fair booth. Any problems were discussed and any ideas for possible solutions or changes are made at that time. Later on, at other board meetings, we will follow up on these recommendations. As stated at the beginning of this paper, long term preparations for next year's Honey Show begins right after the end of this year's Honey Show.

Awards I have won at the fair before becoming the Division Coordinator of the Honey Show

For the past 10 years I have not been able to enter items in the Honey Show because I was the Division Coordinator and sometimes the judge and there would have been a conflict of interests. During that period of time I gathered with me a number of very experienced beekeepers to help in the judging at the Honey Show.

Previous to becoming the coordinator, I won the Open Division Best of Show Ribbon in 1994 for a baked honey item. Also, I have won about 2 to 4 1st or 2nd place ribbons for my liquid honey.

Our PCBA fair booth, which I helped to put together with a good number of beekeepers, has won a number of Organization Exhibit 1st place ribbons as well.