

Storage of hives

I am sure that at some time I have written an article on storage of equipment but since I can't remember when it was I thought that I would write another one (it is that time of year again). Hopefully there are members of the organization that are storing their equipment for the winter that have bees still in them so I will make mention of some pertinent items if interest to them before I get too carried away. Even though a hive that is overwintering is full of bees it really has very little defense mechanisms in place. Summer hives have guards posted at the entrance to keep any unwanted visitors away. This is not true when it comes to cold weather. Cool weather to us Alaskans is bitter cold in bee degrees. Remember that a bee can't move unless its own body temperature is above 45 degrees. That is about the temperature that it got up to this afternoon. I saw yellow jackets around the hives but no bees. Yellow jackets are built for these temperatures and can keep messing with the wintering hive. Entrance reducers should be on the hive to keep things warmer inside as well as keep the entrance small enough to restrict the easy access of the yellow jackets. Bees can still get out and about in these times but they don't need very much of an opening to do so. Mice also enter hives that have bees in them and will chew out the pollen that has been stored in the lower section of the combs. I pulled off the lids of a couple of hives a couple of days ago and the bees were in a compact cluster. Those that were on the outside of the cluster buzzed their wings and raised their stingers in the air but were not inclined to fly. I took the frames apart and noted that the bees in the center of the cluster were warm enough to make the quick launch and they were quite lively. The point that I am making is that as the weather turns cooler destructive pests can get quite close to the cluster without penalty and do some serious damage. If you have not reduced the size of the entrance yet now is not too late, just make sure that you don't trap the mouse inside the hive.

For those beekeepers that have hives that are empty of bees and are putting them away for the season here is some advice as well. Drawn comb is the most important item that a beekeeper can possess so whatever you can do to keep it from being chewed on is not wasted effort. Simply stacking up the boxes on the bottom board and screening off the entrance with quarter inch mesh (or eighth inch mesh) allows ventilation and will work pretty well. A metal queen excluder works well as a mouse screen and that can be placed on the top allowing a flow of air throughout the hive. If it is possible to put the hive away after the bees have licked the supers clean there will be less moisture and a lower chance that you will have mould develop. Remember

that honey is hygroscopic which means that it will draw moisture to it and moisture is what is needed to get any layer of fungus to grow. Any drops of honey seem to grow in size during the damp times of late fall and early winter. Good dry airflow helps keep this from happening.

Cold does not seem to have much effect on comb except to make it brittle. When the frames are warmed enough this effect is lost and it is safe to store hives outside in sub zero temperatures without problems. Just don't move them around during the cold part of winter and they should be fine. Each year there seem to be a number of beekeepers that report that the wind blew their hives over. If it happens in the cold part of winter expect that there will be some damage done particularly to the new wax areas. Plastic foundation holds up better than pure wax but when the whole super takes a dive to the ground the wax may separate from the foundation causing the bees to have to start over in whole areas.

Winter is traditionally the time when repairs are made to the hive components so be sure to set things out that need some extra attention.

Steve Victors

Classroom Visits

School Presentations can be lots of fun for both the beekeeper and the students. I try to have several hives that I have set aside just for that purpose when we head into winter. Observation hives can be stocked and last for quite a few days allowing several presentations to be done before the bees eat all the honey and the brood hatches out. Having a marked queen is an advantage because the kids all will want to see her. I have done a number of presentations at local schools and thought that I would pass on some of the things that seem to work out pretty well.

I talk first and show the bees last. Once the cover is off the observation hive it is pretty hard to shift the focus, so the role of pollination and food supplies is usually first on the list. A third of our food supply is related to the honeybee and the kids are pretty surprised that there is a relationship between the activity of the honeybee and the hamburger that they eat (alfalfa is a pollinated crop).

There is so much that can be tied to the goings on in a beehive that we see here in society and kids really like to see the connections. One of my favorites is talking about how the girls do all the work and the boys just sit around the hive and eat honey all day. The boys in the classes think this is

pretty cool until they hear the story of the eviction of the drones. Teachers love this story because you can tie it to homework and work ethics.

Of course stings are always a hot topic of discussion. The gentleness of the honeybee is almost always compared to the attitude of the yellow jacket, which has no penalty for stinging. I try to get the point across that beekeeping is not dangerous and the bees sting only for a good reason. Children can understand that if you were being squished or if someone were wrecking your house you would have a good reason to sting them. I almost always try to do a little math with the children and use the USDA Bee lab findings of 7 stings per pound of body weight for a critical dose. This means way over a thousand stings for somebody like me, 700 for the average 5th grader. I would have to just about roll around in a pile of bees to get that many.

I always try to conclude the bee presentations with a taste of honey from the comb. It is pretty easy to uncap half of a frame with a fork. I carry a package of plastic spoons to catch the surface honey without digging into the comb very deeply. One side of a frame can give a taste sample to an entire classroom.

I have a fact sheet that has a bunch of unrelated bee stuff written on it that kids can relate to and here are a few examples. I generally try to sprinkle these throughout the talk.

Bees fly about 12 to 15 miles per hour, which is about as fast as a kid on a bicycle.

It takes about 12 bees their entire lifetime to fill a teaspoon with honey.

A good queen can lay 2,000 eggs in a day.

A worker bee lives only about a month and a half in the summer because they wear themselves out gathering nectar for others.

Bees only take naps for about 5 minutes at a stretch but they never sleep like we do.

Bees talk to each other by smelling.

Adult bees eat nectar and honey which is full of energy but has nothing to build muscles with. The baby bees need pollen for this.

There are 56 to 60 thousand bees in a hive during the summer and almost all of them are sisters. There are only 4 to 5 hundred brothers.

People have been getting honey for over 6000 years from bees and only about a hundred years ago did we figure out how to get the honey without wrecking the hive.

Bees will fly up to a mile and a half from their home to find nectar and their navigation is so accurate that if you move the hive more than a couple of steps while they were gone they can't find it when they get back.

Flowers all look different, smell different, and taste different. The flower flavors the honey.

Red and black look the same to bees but they can see another purple that we can't.

Honeybees visit about 2 million flowers to make one pound of honey

Steve Victors