A Beekeepers Year in Western NC

<u>AUGUST</u> ...we begin thinking about winter. What we do now will have great bearing on how things turn out next spring. This is the real beginning of preparations that will lead to successful wintering. August is usually a time of sparse forage in most seasons and locations, and robbing risk can be high.

- >Reduce entrances to prevent robbing
- >Harvest time for basswood and sourwood honey. You may want to set aside some honey for winter stores or leave a spare super on the hives until you feel stores below are adequate for winter
- >Assess varroa mite loads via sticky board or sugar shake
- >Treat <u>now</u> if mite levels warrant and management philosophy allows Api-Life Var, Apiguard, and Mite Away 2 are your best options
- >Make sure colonies have a minimum of 15lbs. of honey at all times, feed if this is not so
- >Assess brood patterns and re-queen or combine poor colonies with strong ones if you do not suspect disease

<u>SEPTEMBER</u>...more winter preparations. In September goldenrod, asters, and ragweed typically provide abundant pollen sources for fall brood rearing. We hope that goldenrod and aster species provide enough nectar to maintain colony weight. Occasionally the bees load up on these sources for winter stores and you may have to offer super space.

- >Assess brood patterns again and make sure colonies are queen right. Combine poor colonies with stronger ones if you do not suspect disease
- >Feed colonies that are low on stores. They will need a minimum of 45lbs. of honey for the winter, but err on the heavier side. 60lbs. is better. Feeding light syrup, 1:1 ratio, encourages brood rearing for large winter clusters. Heavy syrup 2:1 will encourage the bees to put up stores. If the aster flow is good, colonies are lacking storage space, or are weakened from health issues, they may not take the syrup.
- >Pollen supplements may be used to boost brood rearing and health of winter bees
- >By late Sept. Fumagillin may be fed for nosema control (bee samples may be sent to the USDA bee lab for diagnosis to determine if colonies warrant treatment) Recent studies show Honey-B-Healthy to be a potential deterrant for nosema

OCTOBER...putting your girls to bed for the winter.

>Consolidate supers and frames, make sure there is easy access between the brood nest and stores, leave no empty supers in between or undrawn or empty frames separating frames of honey

- >Remove queen excluders
- >Replace screened inner covers with solid ones
- >Feed 2:1 syrup if stores are still low, or offer your bees frames or a super of honey you have set aside for them
- >Pollen supplements may be fed
- >Once again check for queen right colonies, brood patterns and colony size/strength
- I like to see bees covering a minimum of 5 deep frames by late October, (more is better) but this will vary greatly in different colonies and races of bees, or when wintering nucleus colonies.
- >Install mouse guards/reduce entrances
- >Place brick, rock, or other weight on top to prevent lids from departing in high winds

NOVEMBER -early/mid. FEBRUARY

- >Provide adequate upward ventilation
- >Occasionally heft hives to assess stores
- >Use cold weather/emergency feeding techniques if colonies are dangerously low on stores
- >Remove ice build up at entrance after foul weather or provide an upper entrance
- >If you have done your job in Sept. and Oct. your colonies will be queen right and heavy with stores and now is the time to plan for next season.
- >Repair and paint equipment
- >Place queen, nuc, and equipment orders for next spring
- >Educate yourself with some winter bee reading
- >Remove dead bee build up behind mouse guards/entrance reducers a time or two during winter using your hive tool or a long stick

Mid/Late FEBRUARY and MARCH... willow, alder, maples, and dandelion offer rich sources of pollen and nectar. Late winter brood rearing really kicks into high gear. Brood rearing will cause rapid consumption of winter stores putting bees at their highest risk of starvation. Weather conditions can be volatile but bees will forage given any acceptable opportunity.

- >If weather allows, you may inspect hives on days over 50 degrees to assess queen-rightness, colony strength, brood rearing, and stores. Make quick work of these inspections during cooler temps. to prevent chilling brood or unnecessary colony stress.
- >Combine weak or queenless colonies with strong ones
- >Feed if stores are nearing or below 15lbs., but note that over-feeding will cause early swarms well before the spring honey flow
- >Pollen supplements are usually not necessary unless you

- require earlier build up for fruit pollination or splits
- >Equalize colony strength by 'Robin Hooding', moving brood and bees or honey from the rich and giving to the poor
- >Assess mite loads using sticky boards and/or sugar shake
- >Treat if mite levels warrant and management philosophy allows
- >Fumigillin may be fed for control of nosema (bee samples may be sent to the USDA bee lab to determine if colonies warrant treatment)
- >Queens may be available to re-queen failing colonies
- >Prepare bait hives, swarm traps, or have a swarm catching plan and a spare hive or nuc box to house them

<u>APRIL</u>...almost there! By mid-April starvation risk is generally past. Fruit bloom, dandelions, wild cherry and the big honey-flow to follow.

- >Swarm prevention/make increase colonies
- >Queens may be available to re-queen failing colonies
- >Add honey supers by mid-month, if foundation, add one at a time, if drawn comb you may add as many as you think the bees can fill. Use a bait or coaxer comb when placing foundation supers above an excluder.
- >Be prepared for swarming, have a spare hive on hand
- >you may install screened inner covers

<u>MAY</u>...black locust, tulip poplar, blackberry and other bramble blooms will fill supers this month (we hope). This is what we call a honey flow and strong colonies can fill 2, 4, or sometimes more supers in a matter of 4 to 6 weeks.

- >Provide adequate super space to accommodate surplus honey (you can't get yesterday's honey tomorrow!, so make sure the bees have somewhere to put it!)
- >Swarming can continue this month, be prepared
- >Keep colony inspections and disturbance to a minimum as you will reduce honey production
- >Excellent time to make increase colonies if honey production is not your primary goal and swarm prevention is still necessary in very strong colonies

<u>JUNE</u>...harvest time, often a dearth, with basswood and sourwood bloom coming quick (we hope)!

- >if your colonies did not make honey in May they may have been too weak, or not yet built up adequately, swarmed, or had queen issues
- >the honey flow winds down in early June and is often followed by a dearth in available nectar sources robbing risk is high, reduce entrances
- >harvest surplus supers in early June, by mid-June robbing may make it more challenging
- >extract honey and place empty "wet" supers of drawn comb back on the hives

>super up by mid-month for basswood and for sourwood by the third week of June if these species are prevalent in your area

<u>JULY</u>...cross your fingers for a good sourwood flow. Mite levels usually begin to peak by late July.

- >keep colony disturbance to a minimum until the sourwood bloom is done
- >add supers accordingly, remember you can't get yesterdays honey tomorrow
- >begin sourwood harvest
- >assess mite levels using sticky boards and/or sugar shake
- >treat if mite levels warrant and management philosophy allows
- >make colony increase/splits from very strong colonies if so desired, allow extra honey reserves or be prepared to feed these increase colonies

This information is meant as a general guideline to help you through the seasons. Individual colony condition, elevation, and seasonal conditions such as drought or excessive rainfall can dramatically affect forage and foraging activities. The best way to keep up with seasonal variations in your area is by attending your local bee association meetings and asking other beekeepers what they are experiencing that particular season. Are bees starving from the draught conditions or should I add a few more supers for the best honey flow in years? Keep current and always seek more knowledge.

This will make you a better beekeeper and a better steward of these fascinating and precious pollinators.

A Beekeepers Year in WNC was compiled mostly from personal experience and a wealth of beekeeping knowledge offered from area beekeepers too numerous to mention.(I hope that you know who you are my friends). There is also a growing wealth of resources in the form of books, video, webinars, etc. but always remember 10 beekeepers will have a dozen opinions. So, condemn none, filter often, take what works for you, and leave the rest.

By Jon Christie

Owner: Wild Mountain Apiaries and Wild Mountain Bees

www.wildmountainbees.com