# 2 –From a new beekeeper:

At a meeting of your local beekeeper’*s* association, a new beekeeper approaches you. They keep some colonies at their in-law's place some 60 miles away and cannot inspect these colonies as often as they would like. They have heard about electronic colony monitoring technologies and wonder:

“What conclusions can be drawn about colony status from weight and temperature data that could help me know if my colonies need attention?”

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*Answer should include at least* ***3*** *of these points:*

*\** The hive should be gaining weight during the nectar flow and losing weight at other times. If not, there could be a problem with the colony.

\* The date the colony begins to put on weight is usually the start of the nectar flow, suggesting time to stop feeding and consider adding honey supers.

\* The date the colony stops putting on weight is the end of the nectar flow. Time to harvest.

\* Hive weight can indicate either the need to feed or the need to add supers.

\* The rate of weight gain tells you the relative productivity of one colony compared to the others.

\* A sudden weight loss during swarm season could indicate a swarm.

\* A sudden gain or loss of weight during a dearth could indicate robbing in the apiary.

\* A large, sudden weight loss at any time could indicate absconding, hive theft, hive tipped over by bears, storms, vandals, etc.

*Answer should include at least* ***3*** *of these points:*

*\** A temperature sensor in or just above the brood nest can indicate the presence or absence of brood as the brood is kept about 95 F ( 33-36 C)

\* A temperature sensor in, or just above the honey supers can indicate the presence or absence of the winter cluster, as the bees keep cluster at 50 F or higher ( < 10 C) .

\* A sudden brief rise in temperature could indicate swarm departure.

\* A more prolonged high temperature could indicate the presence of robbing.

\*Multiple sensors in hive can indicate the size, location and movement of the brood and cluster.