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RE: Status Report for 2017 Award to Beekeeper's Association at the University of Utah

The Beekeeper's Association at the University of Utah applied for a grant from the GSL Audubon last August in hopes of raising funds to invest in larger scale honey extraction equipment. This purchase would allow for increased public participation in our extraction events and more honey to be extracted each season. The GSL Audubon funds we were awarded got us a third of the way to our fundraising goal (\$1000 of the \$3000 total). Importantly, it allowed us to leverage that award as "matching funds", and helped us gain a partnership with a corporate entity, the Honeybee Produce Company. This company opened up a grocery store down in Draper last fall, and they agreed to donate 20% of the sales of their re-useable bags to the Beekeeper's Association at the UofU. They will be making that award to us on National Honeybee Day in August 2018, and we should then be able to combine the GSL award with the Honeybee Produce Co. donation to purchase our honey extraction equipment just in time for the fall harvest.

Though our student-led club had hoped to put money raised through last season's honey sales (about \$320) towards the purchase of the equipment, we have had to invest that money elsewhere: on new honeybees. Unfortunately, this past winter was very hard on our hives. The worst weather for honeybees in winter is above normal temperatures. This may seem counterintuitive, so let me explain further. Our honeybee, a species originally brought over from Europe ~500 years ago, evolved with winters. They have amazing traits that allow them to survive prolonged freezing temperatures. Each healthy honeybee hive has 20-30,000 individual honeybees that survive in the hive by lowering their metabolic rate, eating honey stores, and vibrating their wings to stay warm. They exist in what is called a "winter cluster" with all the bees huddling into a ball shape rotating into the middle of the cluster, then out to the outer boundary of the cluster over and over again. This allows for warmth to be generated, as well as high carbon dioxide levels to build, which helps maintain those lower energy-saving metabolic rates.

What happens when we have an unusual warm spell in the middle of the winter months is that the honeybees get confused and think that spring has sprung. They break up that winter cluster and start leaving the hive to forage for nectar, only to find that nothing is blooming. This wastes an incredible amount of energy, drains honey stores, and puts the hive at risk of not surviving until spring. The optimal daytime temperature range for European honeybees is 32-41 degrees F, and as you may recall, northern Utah experienced one of the warmest February's on record, with temperatures regularly topping the low 60's. This was extremely stressful to our honeybees, and we lost 5 hives. To replace bees for a single hive costs \$136; so you can see our honey sales money had to be invested in new bees rather than honey equipment.

This hard winter makes us even more grateful for the award from the GSL Audubon, and we will notify you when our final honey extraction equipment purchase is made. We are very hopeful that some of the members of this great group will be able to attend our fall honey harvest party, and that we will have a bumper crop this year despite some hard setbacks this winter!

We have included a few photos of our current honey bottling equipment for your amusement: buckets and spoons. We are SOO excited to purchase a honey bottling tank this season! Thank you!

