How to use iNaturalist to collect bee data for bee specimens

1. Do steps 2-5 before you go out into the field. These steps only need to be done once
2. Download the iNaturalist App on your phone
3. Allow iNaturalist to access your phone's camera
4. Create an iNaturalist account, please choose a user name that identifies who you are. Mine is karen_wright. This can be done on your phone or your computer.
5. Go to the 'Community' tab and select 'projects' and search for Washington bee atlas. Click on this project. (This is easiest done on your computer). In the top right corner of the screen, choose 'join this project'
6. Steps 7-20 will be done in the field when you collect your bees.
7. A Collection Event is defined as a particular species of flower (can be multiple individual plants) at a particular location on a particular day by a particular person.
8. A sample number is assigned to each collection event for each day. Sample number 1 will consist of all the bees you collect at a particular location on the first flower species you collect from. While at the same location on the same day, all the bees you collect from that flower species will go into the same jar, sample #1. The second species of flower at the same site will be sample #2. If you drive somewhere else and start collecting again on the same species of flower that you sampled on at the previous location will become sample #3. Consecutive sample numbers for each day. The next day, you start again with sample #1.
9. In the iNaturalist app on your phone, go to settings and turn off the Automatic Upload.
10. After you collect your first bee on a flower, create an iNaturalist record. Click on the 'observe' button (on an iPhone, this looks like a camera).
11. Take at least 3 pictures. First a close-up picture of the flower. Second a picture of the overall plant. Third a close-up of the leaves. Additional pictures help in the identification of the plant. The underside of the flower and the arrangement of leaves on the plant can all help.
12. Do NOT add photographs of bees to the Washington Bee Atlas!!! Only the plants that you catch the bee on. If you want to add photographs of bees, join the Washington Native Bee Society project on iNaturalist.
13. Next click on 'what did you see?' iNaturalist will give you suggestions. If you agree that the plant that you take a picture of is that same species, choose it, don't free type. If you are not sure, choose the option that you are confident about. If you know it is a mustard, but don't know what genus, choose Brassicaceae. If you don't know it at all, search for 'Angiosperm' and select that option. If you don't know it, put @abe in the comments field. This will notify a good Washington botanist and he will identify the plant.
14. If you are collecting in a cultivated garden click on 'captive or cultivated' and choose yes.
15. If you collect a bee that is not on a flower, don't take any pictures, create an observation without uploading any pictures. In the notes, you can write 'collected at nest' or something similar.
16. Next click on Add to a project, since you already joined the Washington Bee Atlas, you should be able to choose it.
17. Enter the sample number and enter '0' for the number of bees collected (you will change this number later when you pin your bees).
18. Check the accuracy of the GPS coordinates. We like this to be under 10m. If it is higher, wait a while for the GPS to find more satellites. If you have terrible reception, you can modify this later when you edit your observations.

19. When you are satisfied with your record, click ‘share’ or ‘save’. You will edit it later.
20. Also create a physical label for your jar. At a minimum, your jar label should have the date, the sample number, a location (description or GPS coordinates) and a description of the flower (yellow aster #1 or Helianthus annus).
21. The rest of the steps will be done after you get home.
22. At the end of the day, go into settings and turn on ‘Automatic upload’.
23. After you pin your bees (if you need a protocol on how to pin bees, contact karen.wright@agr.wa.gov) , using the jar label as a lead-label for all your specimens, you will edit the location and the number of bees you collected for that observation. This is easiest to do on a laptop or desktop but you can do them on the phone app.
24. Log in to iNaturalist, go to ‘your observations’. Choose to organize it by ‘List’. Newest records are on top. Choose the record you want to edit, click on ‘edit’. You can zoom in on the map to see exactly where you collected it. You can drag the spot on the map to change the location if you couldn’t get good reception in the field.
25. In the ‘where were you’, edit it to include the closest city, state and country. Erase everything else. Use this format ‘Yakima, WA, USA’
26. Change the number of bees from ‘0’ to the actual number of bees that you collected in the sample.
27. Give your address and iNat name to Karen Wright (karen.wright@agr.wa.gov) individual labels will be mailed to you once per week.
28. When you get the labels in the mail, you will have as many labels for each sample to match the number of specimens on them. On each label, from each date you collected on, the label will have the date, then the sample number and an additional number to make that specimen unique. If you collected three bees from sample #6 on a particular date, you will get three labels with sample 6.1, 6.2, and 6.3. It doesn’t matter which bee you assign to each label as long as the date and the sample number are correct.
29. Trim the labels for each sample number so that there is very little white space around the text. We want the labels to be as small as possible (about a millimeter on each side).
30. Find the correct specimens and put a label on each bee. The head of the bee should be pointed to the left side of the label ←. Bees poop barcodes (the butt of the bee faces the barcode).
31. After labeled, turn your specimens in to Karen. It is best to hand deliver the specimens, but they can be mailed. If you need to mail them ask Karen for the mailing protocol.