MAWDC SEQ post field-pre DNA extraction Sample Processing

Make sure your sample has an iNaturalist number

For gilled/pored, stalked mushrooms

1. Choose one fruiting body for destruction/DNA sequencing/spore print
2. Label 2 microcentrifuge tubes with the iNaturalist number for your sample. Label the cassette tape holder or other container with this number, the date and field ID for your sample.
3. Surface sterilize a non-porous cutting surface (e.g. tile) and place the cap on the surface. Using a knife dipped in 70% EtOH (ethanol) and air dried, remove approximately ¼ of the cap for a spore print and place on white and black paper in a secure location (Fig.1)
4. Using forceps placed in 70% EtOH and air dried, remove a small (0.5 x 0.5 cm) section of the upper stipe and place this section in a labeled microcentrifuge tube (Fig. 2) This will be used for subsequent DNA extraction.
5. Using the same forceps and surface sterilized knife if necessary, remove a section of the cap approximately 0.5mm wide at the outer surface, enough to contain a few gills or some pore surface for subsequent microscope examination.
6. If you haven’t done so already, take an image of the cap cross section to illustrate gill attachment.
7. Place the fruiting bodies to be dehydrated in a paper/wax bag labeled with the iNaturalist number, field ID and date
8. At this point you should have
   1. 1 microcentrifuge tube with a 0.5 x 0.5 x 0.5 section of tissue for DNA extraction
   2. 1 microcentrifuge tube with a gill/pore surface section for microscopy
   3. 1 container with a cap section for a spore print
   4. 1 bag containing fruiting bodies to be dehydrated for preservation







