Pressing and Mounting Roses

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Introduction

History

- Herbaria of Hieronymus Harder (1523-1607):
    - Herbarium in Munich, Bavarian State Library https://daten.digitale-sammlungen.de/~db/0001/bsb00011834/images/index.html?id=00011834&nativeno=81v

Pressing Flowers

- Taking a scientific approach rather than as art

1. **Overview of the process: Making a rose sandwich…**
    a. The objective is to press the specimen flat in a manner that also allows some airflow to allow the specimens to dry without rotting.
        i. Even pressure
        ii. Absorbent material to wick the moisture out of the specimen
        iii. Airflow to allow the wicked moisture to dissipate
        iv. Structure to prevent the specimen from moving

2. **Materials & tools**
    a. Plant Presses
        i. *(Display)* This is my press (I actually have 2)
        ii. Portable plant presses ($35-$250)
            1. Different sizes 5x8, 6x9,. 12x16, 12x18
            2. Rigid construction with a good way to tighten it down
            3. I like grids or plates with holes rather than solid plates (but if one has enough 'ventilators', the solid plates are good
            4. Avoid the "Microwave dryer" presses
            5. Someone with woodworking skills could make one
        iii. DIY alternative (not portable)
            1. Big stack of heavy books that you no longer care about (Now you have a use for your old encyclopedia set)
            2. Two flat boards and a stack of bricks

b. Cardboard separators, also called ventilators, about the same size as the press
c. Blotter paper or drying paper, thick white paper that absorbs moisture from the plants being pressed
d. Newsprint/copy paper
e. Notecards (3x5 or 5x8) For recording details about what is being presses.

3. Setting up the press
    a. Consider where you are going to put the press while the flowers are drying
        i. Plan for the press to have good ventilation but not in direct sun
        ii. Should be climate-controlled … you are looking for lower humidity
        iii. If you are going with the "stack of books" method, you want someplace where things will not be disturbed for several weeks
    b. Lay out your workspace:
        i. I generally open up the press and pre-arrange the empty layers in the correct order on my left while I work to "build the sandwich" on the right-hand stack.
        ii. I have a large heavy book (like Gerard's Herbal) or a clean brick at hand that I use to temporarily weigh down the stack and keep freshly inserted specimens in place.
        iii. I also arrange a space where I can trim specimens and blot off any residual water so I am not dripping water on layers in the stack.
4. Preparing specimens
    a. Cutting the flowers
        i. Choose fully-open blooms (Buds generally do now press well.)
        ii. Include a couple sets of leaves (but how much depends on the size of your press… This is one of the reasons I like the 12x18 inch press.
    b. Minimize external moisture by cutting the blooms after the morning dew has dried.
    c. Place blooms in some water so they stay hydrated until you are actually putting them in the press.
    d. After cutting, inspect the specimen for bugs and remove them (but not so aggressively as to damage the bloom(s).
    e. Write info about the specimen on a 3x5 note card (each specimen gets a card):
        i. Rose variety
        ii. Date of collection
        iii. Where collected
        iv. Origin of plant (if known) (i.e. where did you get it and how long has it been growing in this location)
5. Putting the flowers in the press (Making a rose sandwich…)
    a. You are making a multi-layer rose sandwich:
        - Pressure plate
        - corrugated cardboard (ventilator sheet)
        - absorbent blotter paper
        - newsprint or blank copy paper *(technically this is optional)*
        - THE ROSE (or other flower)

- newsprint or blank copy paper *(optional)*
- blotter paper
- Cardboard
- absorbent blotter paper
- newsprint or blank copy paper *(optional)*
- THE ROSE (or other flower)
- newsprint or blank copy paper *(optional)*
- blotter paper
- Cardboard

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- Pressure plate

b. You are building from the bottom up.
c. Position the bottom layer:
    i. Make sure your binding straps are under the bottom plate and spaced evenly
    ii. If this is the first flower in the press,
        1. start with the bottom pressure plate, add a sheet of cardboard then a sheet of blotter paper
    iii. Otherwise: Start with the top cardboard sheet for the top specimen in the press and add a sheet of blotter paper
    iv. Technically, you can now position the specimen but I like to sandwich my roses between sheets of newsprint or blank printer paper
        1. This is to “protect” the blotter sheets from getting plant mushed directly into them
        2. If your specimen is larger than the 8.5x11 sheet, you may have to use two sheets slightly overlapping
d. Position the specimen in the paper:
    i. I generally put each specimen in its own layer though I have done two on the same layer if both are small (Another advantage of a larger press).
    ii. Cut off the part of the specimen that was in water or use a paper towel to dry off that part
    iii. Place the flower on prepped bottom protector sheet (or blotter paper)
    iv. The whole specimen must fit on the paper with none stick out over the edge. Trim if necessary
        1. Note: the objective is to represent a full intact example of the plant and bloom. Trim off from the bottom of the stem so it fits.
        2. I like to leave at least an inch on all sides.
    v. Put the note card about the specimen in next the the specimen
    vi. Place the top sheet of newsprint or blank printer paper in top of the specimen and apply gentle pressure to start flattening the flower
    vii. With one hand on the top sheet apply pressure, look between the sheets to make sure the bloom and leaves do not overlap by gently moving parts

around, applying more pressure to keep what you arranged from moving around.

e. Once you are satisfied with the positioning
    i. Add the top layer of blotting paper while doing you best to keep the plant in the desired position
    ii. Similarly, while keeping the pressure on, position a cardboard “ventilator” on top.
f. Put the heavy book or clean brick on top while you prep the next specimen
g. When you have placed all your specimens in the press, place any unused blotter and cardboard sheets on the stack making sure that the last/top layer is cardboard
h. Position the remaining pressure plate on top and connect the two pressure straps
i. Tighten the straps gradually by alternating tightening of each strap. The idea here is even pressure that does not allow the samples to move and squeezes the two pressure plates together.
j. I generally let the tightened press sit for an hour or two then loosen the straps and carefully check to see if anything moved out of place. If so, I gently adjust the specimen then re-tighten the straps

6. How long should they be in the press?
    a. Depending on the ambient humidity and air flow, it can take from 1 to 4 weeks for the specimens to dry.
    b. It is possible to leave them in the press for too long. They become quite brittle and will fall apart.

Mounting the dried flowers

I choose to mount my roses like they are herbarium specimens.

- Tools and Materials
    - Acid-free mounting boards
    - Frames
    - Data card
    - Neutral pH adhesive
    - Small pointy paint brush
    - Wax paper
    - Tweezer/forceps
    - If you have particularly thick specimens, you may want use one or more layers of picture matting board that fits your frame. Depending on the size of your specimen and the size of the opening in the matboard, you may need to increase the size of your frames
- Process

- Print up the set of information cards (Avery 5388 White Index Card, three 3x5 index cards to a sheet).
    - The format of the information on the card can vary but generally includes:
        - Common name/Variety Name
        - Species name (*Most roses are Rosa x <something> but there are true species roses)*
        - Location where the specimen was cut
        - Who collected it?
        - Date collected
        - Origin of the plant at that location, if known
- Uncover the specimen. Remember that it will probably be fragile at this point.
    - Be gentle when removing the layer in immediate contact with the flower, the plant might stick to the paper
- Decide how you want to place it on the mounting board
    - I generally do this by placing a piece of wax paper over the specimen
    - Cover that with one of the pieces of cardboard used as a ventilator
    - Holding the two pieces of cardboard firmly together, I flip the “sandwich”
    - Take off what is now the top piece of cardboard, the blotter paper that is now on top, and the newsprint/copy paper that was in contact with the flower.
        - Again, remember to be gentle because the flower may stick to the paper.
    - At this point I am looking at the “back” of the specimen.
    - I then put the mounting board on the specimen then the cardboard
    - Carefully flip it back right side up and remove the cardboard and wax paper
    - Use the tweezers to carefully move the specimen to where you want it on the mounting board.
        - If it does break apart, use the tweezers to rearrange and put things back together.
- Gluing the specimen to the mounting board
    - When you are satisfied, put the wax paper over the piece again and do something like line up the edges of the wax paper with the edges on the mounting board. This will allow you to put the mounting board back in the same position after applying the glue to the specimen
        - The wax paper is to prevent any excess glue on the specimen from sticking to the covering board while pressure is applied and the adhesive dries.
    - Carefully put the cardboard back on and flip the whole thing again so the piece is face down again.
    - Carefully remove the cardboard and mounting board working hard to not move the specimen.,

        - Squeeze a small amount of adhesive (no more than a teaspoon) into something small and disposable. I use a clean plastic bottle cap or take-out condiment cup.
        - Use the small detail paint brush to put a bunch of small dots of glue on the back of the specimen. You want to make sure that there are enough spots of glue to firmly secure the pressed flower, the leaves and the stems to the mounting board.
        - Carefully place the mounting board in position on top of the flower so it is lined up as you arranged it.
        - Place the cardboard ventilation sheet and then a large heavy book on that, to press flower and the mounting board together
        - Give it about 5 minutes
        - Remove the book/weight and, with the specimen and mounting board still sandwiched between the two pieces of cardboard, flip the now thing over so now the specimen is right side up.
        - Gently lift the cardboard and wax paper off the specimen to check that it is oriented correctly.
            - If not, use the tweezers to nudge the pieces to the correct position.
        - Apply glue to the back of the printed information card and glue the card to the mounting board
            - If you are going to use a matte board when framing the piece, remember to position the information card so it is not obscured by the matte board.
            - If there is insufficient room on the front of the piece, or you do not wish for the info card to show, you can glue the card to the back of the mounting board.
                - If you choose to place the info card on the back of the mounting board, remember to place a piece of wax paper over it to any excess glue that squeezes out will not cause the cardboard to adhere to the mounting board
        - Put the wax paper back, then the cardboard, and a weight (big heavy book) on top.
            - You can also put the whole “sandwich” back in the plant press and use the press to apply even pressure.
        - Depending on the humidity, allow 24 to 48 hours for the glue to fully dry.
- Framing the piece

    - I choose to frame mine using inexpensive plastic frames I got at the craft store (Micheals) or online. The mounting board is 11.5”x16.5” so I ends up using 12x18 poster/photo frames
        - Because of the way these frame assemble, the glass presses on the specimen and keep it stationary under the glass.

- If you are choosing to use a matte board in the frame, you will probably have to go with a more expensive frame unit that has the space for the backing board, the mounted specimen, the matte board, and the glass in the frame.,

Materials List

Specific materials

- Plant Press
  - https://www.homesciencetools.com/product/plant-press-12-x-18/ ($35.96)
  - https://www.flinnsci.com/flinn-plant-press/fb1115/ ($53.27)
  - **https://www.bioquip.com/search/DispProduct.asp?pid=3115 ($69.87) (nicest kit for the money)**
  - https://herbariumsupply.com/product/plant-press-kit/ ($99.20)
  - https://www.carolina.com/catalog/detail.jsp?prodId=663060 ($96.00) Student plant press
  - https://www.carolina.com/catalog/detail.jsp?prodId=663055 ($123.00) Improved College plant press
    - What is the difference between the Student and Improved College models? From what I can tell, the Improved College model has two more slats in the pressure plates (13 vs 11).
- Blotter paper ("Dryers")
  - https://www.bioquip.com/Search/DispProduct.asp?itemnum=3125 ($16.54 for 12-pack)
- "Ventilator" cardboard sheets
  - https://www.forestry-suppliers.com/product_pages/products.php?mi=52891&itemnum=53741 ($15.50 for a pack of 12)
- Blank newsprint
  - https://herbariumsupply.com/product/unprinted-newsprint-250/ ($15.35 for 100 sheets)
- Herbarium mounting boards (11.5 in x16.5 in)
  - https://www.forestry-suppliers.com/product_pages/products.php?mi=52962&itemnum=53909 ($34.75 for pack of 100 sheets)
  - https://www.carolina.com/preserved-botany/herbarium-mounting-paper-pack-of-100/663211.pr ($34.00 for pack of 100 sheets)
- Lineco neutral pH Adhesive
  - https://www.amazon.com/dp/B001I6FEHE/ ($9.34)
  - Can also be found at art supply stores like Jerry's Artarama
- Printable index cards (Avery 5388)
  - https://www.amazon.com/Avery-Printable-Cards-Inkjet-Printers/dp/B00006HPWA ($14.82)
- Large tweezers/forceps
  - https://www.amazon.com/dp/B094JPMYG3 ($10.45)
- 12x18 photo/poster frame
  - https://www.michaels.com/basics-multi-purpose-frame-studio-decor/10146800.html ($11.99)

Commodity/Easy to find materials

- 3x5 index cards
- Small detail paint brush
- Big heavy book(s) or rigid board 12x18 and a brick or other weight
- Disposable bottle cap to hold glue

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