How to Label Fossil Specimens

Most treatments applied to specimens should be reversible, but in the case of specimen numbering the number should be permanent. In the event of error, the number should be carefully scratched off with a scalpel blade and rewritten.

The principle behind labeling is to put a number on the specimen which cannot be removed accidentally by general handling; for example, over time oil from fingers handling a specimen can wear away the ink.

1) Locate a spot on the specimen that does not have a scientifically significant diagnostic feature.

2) If the specimen has more than one piece, all pieces should be numbered (provided that they are large enough). This is important even if the pieces have been glued together, as the specimen could break apart at the glue seam, or may be intentionally disarticulated for study. When researchers study material, they frequently have more than one specimen out, so a detached piece, or several limb bones unmarked, could easily be confused if not all marked with the specimen number.

3) If there is matrix around the specimen, it is better to put the number on the matrix. If a specimen is later prepared, be sure the number is written again somewhere on the specimen. This is particularly important for acid preparation, where the matrix is dissolved and even numbers written on the bone can be removed (see “special cases” below).

4) If the specimen is light colored, a white paint background will not be necessary. Take a Q-tip, dip it in alcohol or acetone, and rub it on the area on which you want to write the number to remove any grease (this cleaning is not required for a soft sandy matrix).

5) When the alcohol is dry (less than a minute), write the number directly on to the specimen, using India ink or an archival standard indelible ink marker (e.g. a Pigma Micron pen). If writing onto a sandy matrix, take a nail file, or a small flat file, and sand away a section until it is smooth.

8) Write the numbers clearly and distinctly. If the number cannot be read, then errors of transcription or loan paperwork will be compounded.

9) Let the ink dry completely, for at least several hours. If drying does not take place, the acetone in the overcoat of Acryloid [glossary link] will dissolve the ink, creating a blurred number.

10) Quickly brush a coat of Acryloid over the top of the number (slow brushing increases the risk of smearing the ink). Leave to dry.

11) If the specimen is dark colored, a white surface will need to be painted onto the matrix or specimen to make the number visible. Use a white acrylic paint (e.g. Liquitex). If necessary add water to the paint to thin it to the required consistency. Since the use of an underlayer has the potential to be less stable than just writing the number on the specimen, try to write the number directly onto the specimen (i.e., without the paint undercoat) as well.
12) If putting Liquitex paint on a sandy matrix, first apply a coat of Acryloid [glossary link] to seal the matrix on the specimen. Otherwise, the liquid will soak into the porous matrix, and over the course of several years, the Liquitex surface can peel off.

13) In some cases the specimen may be too small to write the number directly onto it. In these cases, the specimen should be stored in a small enclosure such as a gel cap or vial, into which a label containing the specimen number should be inserted. For pin-mounted specimens (where the specimen is attached to a pin pushed through the vial cap) the number should be written onto the cap in addition.

13) Having written the catalog number onto the specimen, specimen labels should be prepared. Choose one of several sizes of labels; the label should be able to fit in the outer box in which the specimen is housed.

14) Fill in the fields on the label using an indelible archival pen. If there is a name change, a new label is written out, and included with the other one. No label is ever destroyed.

15) After the label is filled in, it should be placed in a Mylar [glossary link] sleeve for protection. The sleeve does not need to fit the label exactly; indeed it is better if it does not. Labels are continually taken out of sleeves, either for photocopying or to add data, so a slightly larger sleeve is easier to use over time.

16) Any documents accompanying the specimen (for example a copy of an illustration, or researcher’s notes) should also be housed in a Mylar [glossary link] sleeve. Each piece of paper should have the catalog number written on it.

17) Place the specimen in a tray. All the component parts of the specimen and associated documents should be housed within one tray; within this tray, smaller boxes or trays can be used to enclose or segregate separate specimen components, document sleeves, etc. Wherever possible, trays and boxes should be lined with a conservation grade foam (e.g. Ethafoam) to provide padding for specimens.