

**OSU HERBARIUM  
SPECIMEN DATABASE INSTRUCTIONS**

**Draft 5  
(first version in Access)**

**June 27, 2002**

These instructions are for the purpose of entering and editing specimen records in the OSU Herbarium specimen database. Refer to the **Tips and Tricks** page for the most common errors and the most important procedures for data entry.

# Table of Contents

<b>Table of Contents</b>	<b>2</b>
<b>A. Opening the Specimen Database</b>	<b>3</b>
<b>B. Creating New Records and Finding Existing Records</b>	<b>3</b>
<b>2. Finding Existing Records</b>	<b>5</b>
<b>C. Conventions for Data Entry</b>	<b>5</b>
1. Acronym.....	5
2. Taxon Notes .....	7
3. Name Qualifier .....	8
4. Determined By .....	8
5. Original Determination.....	8
6. Country and State .....	Error! Bookmark not defined.
7. County .....	9
8. Location.....	9
9. Coordinates: Township, Range, and Section .....	11
10. Latitude and Longitude .....	12
11. UTM.....	13
12. Elevation .....	13
13. Associated Species .....	13
14. Habitat .....	14
15. Flowering or Fruiting .....	15
16. Primary Collectors Last Name.....	15
17. Collectors .....	15
18. Collection Number .....	16
19. Collection Month, Day, Year and Date Notes.....	16
20. QC and QC date .....	17
21. Storage Information.....	17
22. Notes .....	18
23. Annotations.....	19
Scientific Annotations .....	19
Informational Annotations .....	20
24. Finishing Steps.....	21

## A. Opening the Specimen Database

- If you are using an OSU herbarium computer, double click on the Specimen Database icon on the desktop. This will open the form.
- If you are not using an OSU herbarium computer, first go to the Start menu and select Settings-Control Panel-Display Properties. Click on the Settings tab and ensure the screen resolution is set to 1024 x 768 pixels.
- Open T:/HerbDB/HerbDatabase/Specimen/Specimen.mdb.
- Double click on the form named SpecimenDataEntry.
- You will be prompted for your initials. Type them in and click on OK.

Oregon State University  
 User: \_\_\_\_\_ Herbarium Specimen Data Entry Form Version 1.0

Accession Number:   Mounted With and Filed Under:    
 Barcoded:

Current Scientific Name:  Acronym:  Annotations:

Taxon Notes:  Name Qualifier:

Original Determination:  Original Determination By:

County:  State/Province:   
 Location:

Enter Initials dialog box:  
 Please enter your initials

Twp:  Rge:  Sec/DLC:  1/4 of:  1/4  
 or, enter Section Notes: (e.g. NWSE or half-section)

Elev (Feet):  Elev (Meters):

Habitat:

Flowering:  Fruiting:  Storage Info:

Collectors:

Primary Coll. Last Name:  Coll. #:  Month:  Day:  Year:  Date Notes:

Notes:

Record #:         10:06 PM

Tips: 1) Use 'TAB' to move between fields. 2) Press 'ESC' multiple times to back out of changes to field(s). 3) Hover cursor over a field for 3 seconds to view help for that field.

## 1. Creating New Records and Finding Existing Records

## Creating New Records

- Click on the **Add New Specimen Records** button at the bottom of the form.
- To create a unique Accession number, start entry into the Accession Number field with the appropriate herbarium code (see below):

### Herbarium Codes

Code	Herbarium Name Variations
OSC	<ul style="list-style-type: none"><li>• Oregon State University</li><li>• Oregon Agricultural College</li><li>• Oregon State College</li></ul>
ORE	<ul style="list-style-type: none"><li>• U of O Museum of Natural History</li><li>• Museum of Natural History, University of Oregon</li><li>• University of Oregon Herbarium</li></ul>
WILLU	<ul style="list-style-type: none"><li>• Herbarium of Willamette University</li></ul>
SOC	<ul style="list-style-type: none"><li>• Southern Oregon University</li><li>• Southern Oregon College</li></ul>

- If there is no accession number on the herbarium sheet, or the form will not accept the accession number you have entered, show the sheet to a data manager.
- Enter the accession number found on the specimen sheet (which is found on the label for WILLU specimens). Remove the leading zeros if there are any (e.g., if the accession number reads ORE04290, enter ORE4290).
- If there are two specimens labeled as distinct taxa on one sheet enter them as **two** separate records. For the first record, enter the accession number as printed on the sheet. For the second record, enter the same accession number with a B at the end. If there is a third taxon, enter the accession number appended with a C, and so on. **Never use an A.**

If a sheet contains more than one taxon, then only one of the taxa on the sheet will be filed under the name on the folder jacket. The other taxon (or taxa) on the sheet is (are) orphaned from the herbarium collections filed under its (their) respective name(s). So that the location of the orphaned collection(s) can be tracked, follow the rule set by the following example:

#### Example

*Salix sitchensis* and *Salix lasiolepis* var. *lasiolepis* are mounted together on one sheet and filed under *Salix lasiolepis* var. *lasiolepis* in the herbarium. This orphans *S. sitchensis* from the main *Salix sitchensis* collections. So that future herbarium users can find it, you should:

1. Enter the *Salix lasiolepis* var. *lasiolepis* record as usual.
2. After the record for *Salix sitchensis* is created, go to the **Mounted with Filed Under** field at the top of the form and enter the accession number of the *Salix lasiolepis* var. *lasiolepis* record.
3. Neatly pencil in **File** ✱ to the left of the most recent annotation for the *Salix lasiolepis* var. *lasiolepis* collection on the herbarium sheet.

Accession Number  
 Mounted With and Filed Under

Barcoded

Current Scientific Name:  **Salicaceae**

Acronym

## 2. Finding Existing Records

Click on the **Locate Accession** button at the top of the form. This will bring up the Locate Accession window. Type in the accession number for the record of interest into the Locate Accession window and click OK.

User: TJC Thea Cook **Herbarium Specimen Data Entry Form**

Accession Number  
 Mounted With a

Current Scientific Name:

Acronym

Taxon Notes

Original Determination  Original Deter

**Locate Accession**

Type in characters then drop the list to narrow the search.

## C. Conventions for Data Entry

### 1. Acronym

The currently accepted name for this specimen is usually on the most recent scientific annotation (see annotations section).

If there are no annotations, use the name on the original label.

If any annotation has **File as** by it, its determination takes priority over the name given in the most recent annotation and should be used to create the acronym.

Enter first 3 letters of genus, then first 3 letters of the species epithet, followed by first 3 letters of the variety or subspecies name for the specimen. When only the species is named without a subtaxon, the acronym is the first 3 letters of genus and the first 3 letters of the species epithet.

#### Example

Current Scientific Name on Label	Acronym field
Senecio bolanderi var. harfordii	SENBOLHAR
Senecio bolanderi	SENBOL

- If the name includes both subspecies and variety, leave out the subspecies abbreviation in creating the acronym.

**Example**

Current Scientific Name on Label	Acronym field
Torreyochloa pallida spp. pallida var. fernaldii	TORPALFER

- After entering an acronym, TAB, down arrow or enter.
- The form will automatically fill **Species** and **Subtaxon** fields (where applicable).
- Always check that the **Species** and **Subtaxon** fields match exactly with the specimen information.

**The subtaxon form (i.e. spp. or var.) on the herbarium sheet must agree with the form that appears in the subtaxon field on the computer screen. If it does not, enter the entire name, including authorities, into the Taxon Notes field.**

Examples:

A subtaxon form is not designated to variety or subspecies; e.g., most recent annotation reads *Salix exigua* *exigua*

Once the acronym is entered the wrong subtaxon form appears in the **Subtaxon** field; e.g., **spp.** appears in the **Subtaxon** field whereas **var.** is indicated on the annotation or visa versa.

## Troubleshooting



Current Scientific Name: Aster breweri

Acronym: ASTBRE

Taxon Notes: [Empty]

Original Determination: Aster

ASTBRE	Aster breweri
ASTBRE2	Astragalus brevidens
ASTBRI	Aster brickellioides
ASTBRIBRI	Aster brickellioides var. brickellioides
ASTBRIGLA	Aster brickellioides var. glabratus
ASTCAL	Astragalus californicus
ASTCAL2	Astragalus calycosus
ASTCALCAL	Astragalus calycosus var. calycosus

- If another species name appears in the scientific name fields, follow the steps below:
  1. Check the spelling of the acronym you type in the Acronym field.
  2. If the spelling is correct, view the drop down list. Look for a match and select it if found. Sometimes, more than one taxon shares a character code. For example, ASTBRE is *Aster breweri* and ASTBRE2 is *Astragalus brevidens*.
  3. If the correct acronym cannot be found leave the **Acronym** field blank, and enter the full species name including authorities into the **Taxon Notes** field.

## Hybrids:

Specimens that are filed in hybrids folders are excluded from entry for the BLM county project.

Otherwise, enter the three letter genus acronym, then the acronym for the species epithet which comes alphabetically first, then “X”, and then the acronym for the second species epithet. If, when you move out of the acronym field, the field becomes empty, type it in again and check the spelling. If, after re-typing it, the same happens again, let a database manager know. We may need to add it to the list of potential names in the database.

### Hybrid Example:

Label Data	Acronym field
Hybrid between <i>Elymus lanceolatus</i> and <i>Elymus elymoides</i>	ELYELYXLAN

If this abbreviation does not appear as an acronym drop down list:

Label Data	Taxon Notes field	Name Qualifier field
Hybrid between <i>Elymus lanceolatus</i> and <i>Elymus elymoides</i>	hybrid between <i>Elymus lanceolatus</i> and <i>Elymus elymoides</i>	hybrid

## 2. Taxon Notes

- Any notes regarding the status of **current** scientific name (not morphological notes) are entered into this field.
- When the acronym is not accepted in the **Acronym** field, the full name and authority of the taxon (as identified in the most recent annotation) are placed in this field.
- If any ambiguity or uncertainty is expressed on the annotation (frequently a hybrid or intermediate), the full text of the annotation describing the discrepancy is entered.

### Example

Label Data	Acronym	Taxon Notes field
Aster alba var. alba, with short hairs of var. nigra	ASTALBXALB	Aster alba var. alba, with short hairs of var. nigra

- When an adjective (e.g., maybe, possible, probable, likely) projects uncertainty of the designation:
  1. If the adjective suggests >50% certainty, add the taxon to the **Acronym** field and the adjective in context to the **Taxon Notes** field.
  2. If the adjective suggests <50% certainty leave the **Acronym** field blank and enter taxon with associated text into the **Taxon Notes** field.

Example expressing > 50% likelihood

Label Data	Acronym	Taxon Notes
Probable hybrid between <i>Elymus lanceolatus</i> and <i>Elymus elymoides</i>	ELYELYXLAN	probable hybrid between <i>Elymus lanceolatus</i> and <i>Elymus elymoides</i>

Example expressing < 50% likelihood


Label Data	Acronym	Taxon Notes
Possible hybrid between <i>Elymus lanceolatus</i> and <i>Elymus elymoides</i>		possible hybrid between <i>Elymus lanceolatus</i> and <i>Elymus elymoides</i>

### 3. Name Qualifier

If the most current scientific name for the specimen has any of the following phrases associated with the name enter them, as written below, in this field.

#### Common qualifiers:

- c.f.
- s.s. or sensu stricto
- s.l. or sensu lato
- hybrid
- probable hybrid (or possible hybrid or other adjective)
- intermediate (or possible intermediate, probable intermediate, etc.)

**Basic Syntax** 

**Do not** capitalize the first letter of any word entered in this field.

**Do not** use a period at the end of any phrase in this field.


Label Data	Taxon Notes	Name Qualifier
Probable hybrid of <i>Senecio bolanderi</i> and <i>S. fremontii</i> .	probable hybrid of <i>Senecio bolanderi</i> and <i>S. fremontii</i>	probable hybrid

### 4. Determined By

- Enter the name of the person who determined the scientific name on the original label.
- The phrase “Determined by” or “Det. by” indicates the determiner.
- If the person who originally determined the specimen is not written or typed on the label, leave this field blank.
- If the person who originally determined the specimen is the same as the collector, leave this field blank.
- Sometimes a date appears by the determiner’s name. Usually the date is very close to the collection date. However, if the specimen was originally determined in a different year from the collection date, enter the original determination, determiner and determination date as the first annotation, not as original label information.

### 5. Original Determination

- Enter the scientific name found on the original label, including all authorities, exactly how it was written.
- Hand-written annotations **on the original label** are usually original determinations and should be entered in this field, unless these notes were initialed by someone other than the collector or determiner. In

**Basic Syntax** 

If the scientific name is absent on the original label, enter **none**

this case, enter the notes as an annotation.

- Once the acronym has been entered at the top of the form, the scientific name it represents pops in as the original determination. To ensure that the enterer checks this field to verify the name (or change it), the field must be changed before saving the record. Usually the change involves adding the authority (as written on the label) or changing the scientific name altogether with the authority. In some cases, the name on the label is both the current name and the authority was excluded, so no change to the field is needed. In this case, to show that you have checked the name, add [na] , for “no authority”.

## 7. County

- Enter the county from the original label. Enter [**Unknown**] if the county has been interpreted as [Unknown Co.].
  - If two counties are indicated, enter the counties in alphabetical order separated only by an **or**. **E.g.:** Herbarium label reads **Deschutes or Crook**; you type **Crook or Deschutes**
  - If the county is written on the specimen sheet or on an annotation label, enter that county or county combination within [ ] brackets (counties in brackets are listed at the bottom of the drop down list).
  - For the BLM county project, specimens without a designated county or with two or more specified counties are not entered.

## 6. Country and State

County	Wallowa	State/Province	Oregon	Country	U.S.A.
--------	---------	----------------	--------	---------	--------

- Currently, only Oregon counties are available for entry into the county field. The **State** and **Country** fields are only activated as long as the County field is blank.
- Leave these fields blank if country, state or county are not indicated on the original label.
- If the collection was made in a state aside from Oregon, enter the entire name.
- If the collection was made in a country aside from the U.S., enter the full name of the appropriate country in the **Country** field, and add the name of the second order political entity (province, state, department, etc.) into the **State** field.
- All other political entities should be entered in the **Location** field (such as municipalities in Mexico).

## 8. Location

- Enter the location data as written on the label.
- Do not correct abbreviations.
- Do NOT break up a phrase, unless the information to be parced is
  - Placed at the beginning or end of the phrase
  - AND removing it does not detract from the meaning of the location in any way.

### General Syntax

- Do not capitalize the first letter of a word entered in this field unless it is a proper noun (like Pacific and Eugene) or an abbreviation such as N,S,E, or W.
- If location data is absent from the original label, enter **none**
- Enter a period after all the location data has been entered.

- If the label is difficult to read or illegible, a knowledgeable person needs to examine it. Write a note describing the problem, and put it on the **Problems** shelf.

- Feel free to repeat information between **Location** and **Habitat** fields if a phrase pertains to both.

Examples:

<b>Label says</b>	<b>Location field</b>	<b>Habitat field</b>
old abandoned cranberry bog north of road to Muddy Lake, 50 yards from end of road.	old abandoned cranberry bog north of road to Muddy Lake, 50 yards from end of road.	old abandoned cranberry bog.
North Umpqua Highway, ditch on east valley floor, black mud, wet ditches.	North Umpqua Highway, ditch on east valley floor.	east valley floor, black mud, wet ditches.
Eight Dollar Mountain road; roadside bank just inside Siskiyou National Forest Boundary.	Eight Dollar Mountain road; roadside bank just inside Siskiyou National Forest Boundary.	roadside bank.
Katherine Ordway Sycan Marsh Preserve; Sycan Marsh, 40 km S of Silver Lake; openings in marsh at NE end of Sycan Marsh. Flooded.	Katherine Ordway Sycan Marsh Preserve; Sycan Marsh, 40 km S of Silver Lake; openings in marsh at NE end of Sycan Marsh.	flooded; openings in marsh at NE end of Sycan Marsh.
Bohemia Mt.; Calapooya Range; rare on dry gravelly disturbed ground at Musick Mine. Exposure: Full sunlight most of the day.	Bohemia Mt.; Calapooya Range; dry gravelly disturbed ground at Musick Mine.	rare on dry gravelly disturbed ground at Musick Mine; full sunlight most of day.
Cone Mt. Tombstone Pass Region; frequent but scattered on the South-facing side of East-ridge to South Peak. Found in dry scoria sand.	Cone Mt. Tombstone Pass Region; on the south-facing side of East-ridge to South Peak.	on the south-facing side of East-ridge to South Peak; in dry scoria sand.
Cemetery Lake, 1.6 km SW of Warrenton; Carex/Picea marsh at SW end of lake; just N of crossing of road to Fort Stevens.	Cemetery Lake, 1.6 km SW of Warrenton; Carex/Picea marsh at SW end of lake; just N of crossing of road to Fort Stevens.	Carex/Picea marsh at SW end of lake.
3 mi SE of Astoria; fresh/slightly brackish tidal marshes at the mouth of the Walluski River.	3 mi SE of Astoria; fresh/slightly brackish tidal marshes at the mouth of the Walluski River.	fresh/slightly brackish tidal marshes at the mouth of the Walluski River.
East end of Eugene occurring with Spargula, Trifolium and Anthemis; in waste ground on the north bank of the Willamette River.	East end of Eugene; in waste ground on the north bank of the Willamette River.	in waste ground on the north bank of the Willamette River.

Moist sandy borders of Devil's Lake.	borders of Devil's Lake.	moist sandy borders of Devil's Lake.
Chewaucan marsh, south of Paisley.	Chewaucan marsh, south of Paisley.	Chewaucan marsh.
dense clay soil in a dry vernal pool beside beside Hwy. #216; 2.4 mi. W. of Wapinitia.	in a dry vernal pool beside beside Hwy. #216; 2.4 mi. W. of Wapinitia.	dense clay soil in a dry vernal pool.

- If there is an annotation on the label noting that the location data on the original label is incorrect, enter the corrected location data from the annotation surrounded by [ ] and enter the original location data in the Notes field starting with the text **original location:**

**Example**

Original Label	Annotation Label	Location field	Notes field
at Sandhill Crossing south of rte. 3374.	Sandhill Crossing is on rte. 2872, not rte. 3374.	at Sandhill Crossing south of [rte. 2872].	original location: at Sandhill Crossing of south rte. 3374.

- Do not correct data for place names that are simply previous names for a place. In the following example, Laidlaw is a former name for Tumalo.

**Example**

Annotation Label	Location field	Notes
Laidlaw is now called Tumalo.	Laidlaw	Location: Tumalo; Location synonym: Laidlaw

## 9. Coordinates: Township, Range, and Section

Enter data for **Township**, **Range** and **Section** (and **Quarter** or **Sixteenth** if present) into these fields, adding zeros in front of single digit numbers.

**Example:**

**Label Data** T2N, R12W, Sec. 12.

**Enter**

**Township** 02N

**Range** 12W

**Section** 12

- If a quarter or sixteenth section is present (e.g. NW1/4 of SW1/4) enter the first partial section into **Sixteenth** (NW) and the second into **Quarter** (SW).

**Example:**

**Label Data** T13S, R14W, Sec. 3, SE1/4 of NW1/4

**Enter**

<b>Township</b>	13S
<b>Range</b>	14W
<b>Section</b>	03
<b>Quarter</b>	NW
<b>Sixteenth</b>	SE

- When a half section is indicated, leave the **Quarter** field blank, and enter the entire coordinates phrase in **Notes** field.
- When the label gives two (or more) sections, enter the first section number in the **Section** field and enter the entire coordinates phrase in the **Notes** field.
- For Donation Land Claims (DLC), enter the **Township** and the **Range**, but leave the **Section** blank. Enter the entire coordinate phrase in the **Notes** field.
- Leave these fields blank if no coordinate data are on the original label.
- Fractional township or range (such as R151/4E) should be entered as the decimal equivalent (such as 15.25E).
- Usually the quarter and sixteenth are cited in the format: **NW of SE** (or NW1/4 of SE1/4 , meaning *northwest sixteenth of the southeast quarter section*). However, sometimes the word “**of**” is missing between the sixteenth and quarter sections and the information is printed on the label in one of the following formats: **NWSE** or **NW<sup>1</sup>/<sub>4</sub> SE<sup>1</sup>/<sub>4</sub>**. In this case, we are unable to assume which is the sixteenth section and which is the quarter section.

You should

1. Enter Township, Range and Section information, as usual.
  2. Skip the **Quarter** and **Sixteenth** fields.
  3. Type the combined quarter and sixteenth information into the **1/4 Section Notes** field using characters N, S, E, or W only (e.g. **NWSE** (**not** NW1/4SE1/4)).
- If only one set of coordinates is showing on the label (eg. SE or SE1/4) enter it into the Quarter Section field.

## 10. Latitude and Longitude

- **Degrees, Minutes and Seconds** fields are available for both **Latitude** and **Longitude**. Degrees are denoted with a " ° ", minutes with a " ‘ ", and seconds with a " ” ” .
- Latitude typically precedes longitude and is followed by N (for north) or S (for south). The longitude proceeds the latitude and is denoted by E (for east) or W (for west).

**Example:** 43°27'45"N, 124°2'20"W **means** 43 degrees, 27 minutes, 45 seconds north latitude and 124 degrees, 2 minutes and 20

**Remember**



- **Latitude** is always NORTH or SOUTH and **longitude** is always

seconds west longitude. Parse data into the corresponding **Degrees**, **Minutes** and **Seconds** fields.

EAST or WEST!

- Often, minutes and seconds are replaced with degrees in decimals like 43.35°N, 124.48°W. In this case, leave **Minutes** and **Seconds** fields blank and enter the degrees as written on the label into the **Degrees** fields.

## 11. UTM's

- As with latitude and longitude, there are two sets of numbers. Typically the first set represents easting (E) coordinates, whereas the latter set provides the northing (N) coordinates. Enter data followed by E or East into the **Easting** field, data followed by N or North into the **Northing** field, and so on.

*Example:*                    **Label:** UTM 10 542,000E 5051000N  
                                  Enter            **East:** 542000  
  **North:** 5051000  
                                  Leave **West** and **North** fields blank.

- The first set of coordinates (followed by E or W) has 6 digits and the second set (followed by N or S) has 7 digits. When entering data into the corresponding fields, enter the numbers WITHOUT spaces or commas between them, but **KEEP** the zeros.
- Enter the zone into the **Zone** field just as it is indicated on the label. If there is no zone, leave this field blank.
- UTM's are always in meters. If what appear to be UTM's are NOT in meters, then they are **NOT** UTM's! Enter the information, as written on the label, into the **Notes** field.

## 12. Elevation

- Enter the elevation as an integer in the **Feet** or **Meters** field. The computer adds commas and **ft** or **m**.
- If there is a range of elevation on the label, indicate the lowest number in this field. Then in the **Notes** field indicate the full range.

## 13. Associated Species

Associated Species	
Acronym	Plant Name (enter common name or scientific name if acronym not found)
PINPON	Pinus ponderosa
	Quercus californica
ARBUT	Arbutus
RHUDIV	Rhus diversiloba
*	

Record: 1 of 4 (Filtered) Close

If the herbarium label indicates other plants that grow in the vicinity of the herbarium collection, click on the **Associated Species** button.

List each plant name on a new line, excluding extemporaneous words like **growing with, and** or **&**. Enter each common name, including names that represent large groups (e.g. grass, sedges, rushes, willows).

### Basic Syntax

Do not enter this section if no associates are listed on the original label.

Enter common names if present, but **do not capitalize** unless the common name includes a proper noun (i.e. Douglas-fir).

**Do not** capitalize names for genera (like *Aster* or *Rhododendron*) when they are a part of a common name (like Pacific rhododendron or showy aster).

- If the plant name on the label is a scientific name, enter the acronym in the Associated Species **Acronym** field and tab to see if the right name appears in the plant name field. If the name does not precisely match (same rules apply here as with Acronym field for the specimen's name), check the drop down list for an acronym that shows a match. If one does not exist, type the name (including authorities if present) into the **Plant Name** field.
- When associated species are indicated with any abbreviation, enter the abbreviation. Do not interpret the name.
- Do not enter plant community names. They belong in the **Habitat** field.

## 14. Habitat

- Enter soil types, slopes, aspects, exposure, ecological information, community type or any other habitat information that is on the label.
- When combining species from different parts of the label, separate the phrases with a **semicolon**.
- Enter morphological or abundance information in the **Notes** field.
- A piece of a phrase from the label can be used; however, if habitat information is present in various parts of one phrase, do NOT break the phrase (as it appears on the label) between these parts.

### Basic Syntax

➤ Do not capitalize the first letter of any word entered in this field unless it is a proper noun (like Pacific or Eugene) or an abbreviation such as N,S,E, or W.

➤ Finish with a **period**.

➤ Leave this field blank if no habitat data is on the original label.

- If you are ever in doubt as to whether you should include or exclude information from one of these fields, just include it. Including extra data is ALWAYS better than excluding potentially useful data.
- Feel free to repeat information between **Location** and **Habitat** if a phrase pertains to both. See examples in the Location section.

## 15. Flowering or Fruiting

If the specimen is vegetative leave both fields blank.

If the specimen is flowering and/or fruiting, enter **X** in the appropriate field(s).

If you are not sure of one or both, enter **?** in the corresponding field.

If any of the flowers' reproductive parts are visible on the specimen (i.e. stamens and/or ovaries), the specimen is in flowering phase. If the ovary is starting to enlarge into a fruit, enter **?** in the **Fruiting** field, since the plant is transitioning into the fruiting phase. If you see what you would call a fruit, but are not sure if it is mature, enter **X** in the **Fruiting** field.

## 16. Primary Collectors Last Name

- The primary collector is the first name associated with the collection number. Enter the last name of the primary collector in this field.
- Names of people preceded by **submitted by** or **subm. by** are interpreted the primary collector.
- **Legit** is the same as collector. Enter the person as the primary collector.
- If it is uncertain which name is the primary collector's, then enter the first name listed on the label.



### Basic Syntax

Enter **s.n.** or **none** for specimens without a collector.

### Example

Label	Primary Collector's Last Name	Collectors
Mason, Smith & Copeski	Mason	Mason, Smith, Copeski
White/Lilico	White	White, Lilico

## 17. Collectors

Enter all collectors on the label in this field. Enter the name as present on the label. Names can be abbreviated in the following cases:

- **HLC** for Henny Chambers
- **KLC** for Ken Chambers
- **RRH** for Richard Halse
- **SS** for Scott Sundberg
- **PFZ** for Peter Zika

Collectors	C. Johnson										
Primary Coll. Last Name	Johnson	Coll. #	2048	Month	8	Day	5	Year	1981	Date Notes	

- Do not separate initials by a space (L.F. Henderson, not L. F. Henderson).
- If the collector's first name is abbreviated as **Wm.**, enter only **W.** as the first initial (i.e. Wm.C. Cusick is entered as W.C. Cusick).
- If the collector's full first name is given, enter it all.
- Omit titles such as Dr., Mr. and Mrs. except when keeping the Mr. or Mrs. is the only way to distinguish between husbands and wives.


**Example:**

Label	Collectors field
Dr. Elizabeth Norton	Elizabeth Norton.
Mrs. John Norton	Mrs. John Norton.
Mr. and Mrs. Norton	Mr. Norton, Mrs. Norton.

## 18. Collection Number

Enter the collection number associated with the primary collector. Make sure the number you enter is the same as the original label.

- There may be other non-accession and non-collector numbers on the label. If you are not sure whether a number is the collector's, take it to a database manager.

**Basic Syntax** 

If there is no collection number  
enter  
**s.n. or none**

## 19. Collection Month, Day, Year and Date Notes

### Month , Day and Year

- Enter a two-digit month, a two-digit day and a four-digit year into corresponding Month, Day and Year fields.
- If the label specifies dates for the collection of both flowering and fruiting material, enter the earlier date in these fields. See the following **Date Notes** section for further entry guidelines regarding ambiguous or multiple dates.
- If there are two dates for the same collection, usually denoting flowering vs. fruiting material, enter the first date into these fields. See the following section for more details.
- If a specimen has a two-digit year (i.e. June '90), and there is no evidence on the label to determine the century in which it was collected, it may be interpreted in the following way:
  - If the year is in the '70's, 80's or 90's, assume it was collected in the 1800's.
  - If the year is recorded between (or including) '00 and '69, assume it was collected in the

1900's.

## Date Notes

Always enter day, month and year into the above fields if possible. Then, re-enter this information exactly as it was captured on the herbarium label, adding necessary text, in the following instances:

- When there is ambiguity between the day and month.
- When there are multiple collection dates (usually flowering and fruiting).
- When specimens have both a date for flowering material and a date for the fruiting material, enter the earlier date into the collection date fields. Then, enter both dates as they appear on the label.

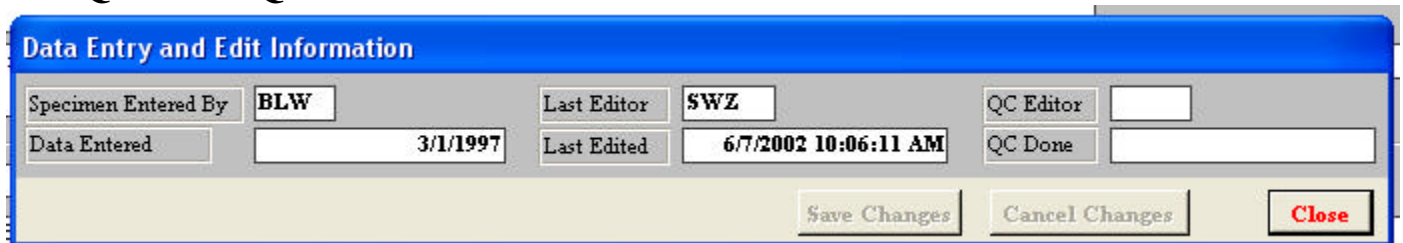
### Basic Syntax

Enter **none** into the **Date Notes** field if absolutely no date is provided on the herbarium label.

Example:

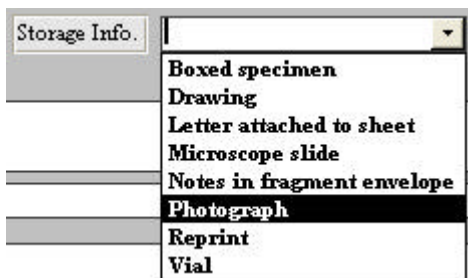
Label Data	Month field	Day field	Year field	Date Notes field
Flr: April 4, 1886 Frt: June 20, 1886	4	4	1886	Flr: April 4, 1886; Frt: June 20, 1886

## 20. QC and QC date



- QC means Quality Control. If you are checking a previously entered record for accuracy against its corresponding specimen, press the QC button when you finish checking the record and type in your initials and the date (depress the space bar three times to enter the date). Also click the QC button if you are editing a record.
  - You are the record editor if you are completing entry of a partially entered record, or if you are adding annotation(s)
  - You are the record QCer if you are checking the record for accuracy of entry. This may or may not entail editing of the record.

## 21. Storage Information



If a specimen is stored in a box, has notes in fragment envelope, has a letter attached to sheet, has photograph attached, etc., enter the correct phrase into this field. Use the drop down list to select a value for the specimen from the lookup table.

Phrases allowed in this field:

Value	Usage
Reprint	Use when a reprint of an article is attached or included with the specimen (usually only used with type specimens).
Photograph	Use when a specimen is a photograph only, or a photograph is attached to the sheet.
Drawing	Use when a specimen has a drawing on the sheet or attached to the sheet.
Vial	Not used yet.
Microscope slide	Not used yet.
Boxed specimen	Use when a dummy sheet is present for a specimen and it is stamped <b>see boxed specimens</b> or a variant.
Notes in fragment envelope	Use when a note or the original label is visibly found within a fragment envelope.
Letter attached to sheet	Use when a letter is stapled or glued to the specimen sheet.

## 22. Notes

All label data **not** entered in other fields are entered in this field. Other clarifying data not present on the original label are also entered in this field (see below).

- When more than one sheet represents the collection of one plant, enter **Sheet 1 of 2;** or **Sheet 2 of 2;**
- Place brackets [ ] around any changes or notes not on the original label.
- If two specimens share the same accession number, and **A** and **B** are already written in after the accession number, enter: **[two specimens with the same accession number OSC14567A & OSC14567B]**

**Basic Syntax**

- Each phrase in this field should be separated with a **semicolon.**
- Finish the **Notes** field with a **period.**

- If you find a specimen with the same number as another and **A** and **B** are **not** already appended to them,

attach a note to the specimen and place it in the **Problems** cabinet.

- If a specimen's most recent annotation is prior to 1994, enter **not annot** into the this field.
- Voucher information can be entered in this field.

## 23. Annotations

Annotations: Must be entered chronologically (oldest one first)				
Acronym	Scientific Name	Annotated By	Annotation Date	Notes
ROMSUK	Romanzoffia suksdorfii Greene	L.C.	1948	
	none	none		2 pods with
ROMTHO	Romanzoffia thompsonii V. Marttala	Vernon Marttala	Sept. 1973	paratype, t
*				

Record: 1 of 3 (Filtered) Close

Annotations are typed or hand-written notes (with or without an annotation label) that either confirm or change the identification of the specimen OR give information about location, morphology, taxonomy or natural distribution for the taxon. Depress the **Annotations** button.

- Do not enter hand-written annotations that identify the county of origin of the specimen if there is no author cited for the annotation.
- Annotation data other than the scientific name, date and author should be entered into the **Annotation Notes** field.

### Basic Syntax

- If an annotation is anonymous, enter **none** into the **Annotated By** field.
- If an annotation has no date, enter **none** in the **Annotation Date** field.
- Finish Annotation Notes with a **period**.

- Annotations are entered chronologically.
  - The first annotation entered should be the oldest.
  - The most recent annotation is entered last.
- Hand-written annotations **on the original label** are generally considered as equivalent to original label information, unless they are initialed by someone other than the original collector or determiner. In that case, enter them as annotations.

## Scientific Annotations

Scientific annotations change or verify the identification of the specimen. "**As determined**," "**As det.**", "!" and "**Confirmed**" indicate that the annotation name is the same as the previous (indicated by the date) annotation.

As you enter an **acronym**, the drop-down list will show the corresponding scientific name. Ensure that your acronym is an EXACT match with the name that appears on the herbarium annotation (see rules for exact matches in the **Acronym** section).

Double check this accuracy when you **TAB** or **ENTER** to automatically update the **Taxon** field. If the acronym you type is NOT an exact match, check the drop down list to see if one exists under this acronym with digits appended to the end. In the drop down list, these like-acronyms are adjacent.

If **File as** has been written next to an annotation and there is only one collection and/or taxon on the page: Its determination takes priority over the name given in the most recent annotation and should be used to create the acronym.

Enter all annotations in chronological order, as normal.

At the end, add a new annotation and *re-enter the acronym* for the name of the “File as” annotation. *Leave out* all other information provided by this annotation, as it has already been entered.

Enter **Curator** in the **Annotated by** field of the new annotation only.

Enter **File as 2002** (i.e. the current year) in the **Annotation Notes** field.

Enter the annotation’s author in the **Annotated By** field.

Enter the date of the annotation in the **Annotation Date** field, exactly as it was written on the annotation label.

#### Basic Syntax

Distinct phrases are separated with a semicolon

Text ends with a period unless [Part B] continues a phrase.



Enter the remaining annotation data in the Annotation Notes field. Morphological data, historical data, etc., goes into this field.

Do not enter the name of the institution or the name of the project with which the annotation’s author is associated (e.g., University of Washington, Oregon Flora Project).

### Informational Annotations

Informational annotations are statements attached to the specimen regarding morphological, historical or ethnobotanical data about the species and excluding name designations.

- Correspondence attached to the sheet should be noted in the **Annotation Notes** field. OR STORAGE INFORMATION FIELD???

1. Leave the **Acronym** and **Scientific Name** fields blank.
2. Enter the annotator and the annotation date in their respective fields.

#### Basic Syntax

Enter **none** in **Annotated By** and **Annotation Date** fields when no information is available to fill them.



3. Enter the text of the annotation in the **Annotation Notes** field.
4. If the annotation text is longer than 255 characters:
  - a. enter **[Part A]** at the beginning of the first annotation. Add a second annotation with the same **Annotated By** and **Annotation Date** data.
  - b. Then, add a second annotation below it with the same **Annotated By** and **Annotation Date** data. The **Number** is changed to the next successive whole number.
  - c. Enter **[Part B]** in the **Annotation Notes** field.

- d. Type the remaining annotation text. Do not enter any more than two “database records” of notes per annotation label. If there is still more text to enter when the second **Annotation Notes** field is full, simply leave it out.

## 24. Finishing Steps

- a. Re-read the data you have entered to scan for typos, quickly comparing the data entered into the fields of the form with the data on the label. Ensure that all data are in the correct fields.
- b. In pencil, write-in **db** to the lower left corner of the specimen.
- c. After a specimen has been barcoded, remove red sticker and/or erase the **db**.

## D. Closing Access & Logging Out



The screenshot shows a horizontal toolbar with the following elements from left to right: a label 'Record #: 1', four navigation buttons (Home, Previous, Next, End), a button labeled 'Add New Specimen Records', a button labeled 'Save Changes', a button labeled 'Cancel Changes', and a button labeled 'EXIT'.

**When you have completed a session, click on the Save Changes button at the bottom of the form and then click on the EXIT button. Exit Access and log off of the computer.**

## E. Tips and Tricks for Data Entry

### Remember

- If the form freezes due to a run-time error or for any other reason, avoid closing the form abnormally (i.e. never CNTRL-ALT-DELETE, never turn off the computer during a database session). If you ever get a run-time error, seek help from a database manager.

### General Field Conventions

- Do not capitalize the first letter of a word in a field unless it is a proper name, a place name, or the genus of a scientific name.
- Do not capitalize common names except for proper names used in common names such as Douglas-fir. If a common name has the name of a genus within it, do not capitalize the genus (e.g. Pacific rhododendron).
- **Do not interpret any information.**
  - Enter all data as typed or written on the label.
  - Do not abbreviate, **except**
  - where there are already abbreviations on the herbarium sheet leave them intact (e.g. do not interpret Rd. as Road. It could be referring to a Ranger District).
- The following fields require **none** if there is no data to populate them:
  - **Original Determination**
  - **Location**
  - **Primary Collector's Last Name**
  - **Collection Number (s.n. is also fine)**
  - **Collection Date Notes (only enter none if no collection date information was given)**
  - **Annotated By**
  - **Annotation Date**
- If in doubt about any procedure for entering data:
  - Set that specimen aside and attach a note to the specimen regarding the problem. Include your initials and the date and put it in the Problems shelf.
  - **OR** make a note in the troubleshooting form that follows this protocol.
  - **OR** ask a database manager.
- The following fields require a **period** at the finish:
  - **Location**
  - **Habitat**
  - **Notes**
  - **Annotation Notes**
- When there is no acronym that **PRECISELY** matches the name of the taxon you are entering:
  - Enter the name of the taxon (with authorities) in the adjacent field, i.e.
    - Taxon Notes** at the top of the form
    - Plant Name** in the Associated Species Section
    - Taxon** in the Annotations section