GOVERNMENT OF WESTERN AUSTRALIA

WESTERN AUSTRALIAN MUSEUM

Submission Guidelines

Last Revised: March 2025

Submission Workflow

1. Fix and store specimens appropriately in the field
2. Sort specimens in the laboratory
3. Prepare and preserve specimens
4. Store specimens in correct vials and jars
5. Label vials with "Specimen Information Label"
6. Prepare electronic data in spreadsheet
7. Obtain WAM registration numbers
8. Add WAM registration numbers to vials
9. Package and deliver your specimens
10. Checklist

1. Fix and store specimens appropriately in the field

In all likelihood you will do some sorting, fixing and storage of specimens in the field or soon thereafter. This initial step is crucial in ensuring the preservation of DNA (where applicable). Follow these guidelines to enhance the quality of your project submission and of the specimen, which may be used in future projects.

Please have protocols established for those specimens where tissue should be collected for potential DNA sequencing, prior to fixing. Samples collected for potential DNA sequencing should preferentially be maintained at a cool, constant temperature whilst in the field. Ideally use a foam cooler box with ice bricks or, if available, place in a fridge or cool room (freezing is not necessary). Samples should not be allowed to sit in the sun or experience significant fluctuations in temperature whilst in the field or back in the lab/office. You should consider this also when transporting samples.

a. Specimens should be fixed or stored appropriately as rapidly as possible after collection using the following protocols (Table 1):

Table 1: Ethanol preservation method summary table.

Taxon Group	Collection Method	Ethanol Preservation Method
Arachnids/ Myriapods	Live, by hand	Small specimens in 100%**; large specimens with leg III in 100% and body in 75%; for Myriapods, several walking legs in 100% and body in 75%
Arachnids/ Myriapods	Dry pitfall trapping	Small specimens in 100%; large specimens with leg III in 100% and body in 75%; for Myriapods, several walking legs in 100% and body in 75%
Arachnids/ Myriapods	Ethylene-glycol pitfall trap	75% OR 100%
Crustaceans	All methods	75% OR 100% Stygo/troglobitic species will be stored frozen, see Table 3
Worms	All methods	75% OR 100% Stygo/troglobitic species will be stored frozen, see Table 3
*Molluscs	Live, by hand	100%
Molluscs	Dry pitfall trapping	100%
Molluscs	Ethylene-glycol pitfall trap	75%

Ascidians	By hand	75 % or 100% ETOH or Freeze (put in container in feshwater and add MgCl and put in fridge to relax before preservation)
Bryozoans	By Hand, when collecting tubular Bryozoans keep colony intact along with substratum it is growing.	75 % or 100% ETOH or Freeze (put in a container with water containing bryozoans and float menthol crystals before preservation)
Hexacorallia (Hard Corals)	Chisel and hammer	Dry and 100%ETOH. To dry: bleach/rinse/dry keep a duplicate in ETOH
Octocorallia (soft Corals, sea pens)	By Hand (Knife)	75 % or 100% ETOH or Freeze
Holothurians	By hand	Freeze or 75% or 100% ETOH. Refrigerate in seawater for 30 min prior to preservation in ethanol
Asteroids and Echinoids	By hand (when possible), Dive knife or other instrument for Echinoids and spikey Asteroids	Freeze or 75% or 100% ETOH
Crinoids	Dive Knife (try to keep specimen intact)	75% or 100% ETOH. Place in container with label between layers of paper towel, add 75% ETOH carefully, place layer of paper towel on top and press down unitl flat and animal relaxs. Lift towel and adjust animal, return paper towel and add next specimens. DON'T FREEZE
Ophiuroids	By hand	Freeze or 75% or 100% ETOH. Relax in MgCl - add solution to animal in seawater until half mgCl and half sw. on relaxed freeze flat or between layers of paper towel in ETOH as for crinoids
Porifera (sponges)	By hand (Sharp knife)	75 % or 100% ETOH or Freeze. Small in ETOH - large freeze
Foraminifera	All methods	75 % or 100% ETOH
Rotifera	All methods	75 % or 100% ETOH
Entomology	All methods	75-100%
Vertebrates	All methods*** - only after contacting relevant Curator/Collection Manager	Frozen – wrapped in absorbent paper towel, double bagged, no ethanol. Tissue (preferable liver or muscle) in 100% ethanol. Dry specimens (bones, mummies) – Double bagged, no ethanol.

*Note that molluscs and mygalomorph spiders are only identified via molecular analysis.
**100% EtOH refers to Ethanol BP, available from PharmAust manufacturing (do not use denatured ethanol).
***Live vertebrates should only be collected for WAM if a WAM Animal Handler is present during capture and monitoring transport to Welshpool. Tissue sampling of live vertebrates can only occur under an Animal Ethics Permit.

2. Sort specimens in the lab

Unnecessary splitting/ lumping of specimens into individual vials can deprive the museum of valuable information that can assist with identifications. Follow these guidelines to ensure that you are sorting your specimens appropriately.

a. Specimens must be broadly sorted according to the following parameters:
    i. FIRST, Site
    ii. SECOND, Broad taxonomic group (e.g., arachnids vs. molluscs)
        - THEN, Collection method (e.g., wet pitfall trap vs. hand collected specimens)
        - OR Microhabitat (e.g., leaf-litter vs beneath tree bark).
b. The following taxon-specific sorting regulations apply in addition to the above rules:
    i. Arachnids/ Myriapods:

- Sort into broad groups (e.g., mygalomorphs, araneomorphs, pseudoscorpions, schizomids, millipedes, centipedes etc.).
- Sort to family/ genus/ species only if you are absolutely certain of your identification.

ii. Crustaceans/Worms:
- Sort into broad groups.
- Sort to family/ genus/ species only if you are absolutely certain of your identification.

iii. Molluscs:
- Sort to a minimum of family level.
- Sort to genus/species only if you are absolutely certain

c. Entomology: Specimens to be sorted at least to Order, preferably family level.
- Immature specimens will not be accepted unless associated with adults

d. Avoid unnecessary splitting of specimens from one geographic site. Do not split specimens where:
   i. You are unsure of whether there are multiple taxa present. WAM staff can split specimens during the identification process if necessary.
   ii. Juveniles and adults have been collected together: the association with an adult specimen may help museum staff identify the juvenile.

EXCEPTIONS: The exceptions to not splitting occur when specimens are definitely to be sequenced for molecular consulting. Then **each** specimen needs to be individually registered for downstream analysis.

3. Prepare and preserve specimens

Choosing the appropriate method for long-term preservation of specimens ensures the integrity of the sample. Please follow these guidelines to ensure that both whole specimens and tissue samples (e.g. destined for DNA sequencing) are preserved correctly.

a. As a rule of thumb:
   i. **Wet pitfall trapping specimens:** not often suitable for tissue sampling and DNA sequencing although we can try, for very critical samples.
   ii. **All other specimens:** may be suitable for DNA sequencing (see Table 2 and Table 3 for treatment protocols).

Table 2: Specimen and tissue preservation techniques (summary)
For example, smaller specimens can be preserved entirely in 100% EtOH and tissues subsampled later whilst for large specimens it is preferred that tissue (usually a leg or several legs) be removed to 100% EtOH prior to preserving the rest of the body in 75% EtOH.

Specimen type	Specimen component	Details of tissue extraction	Preservation method
Large arachnids (e.g., mygalomorph spiders)	Whole specimen	Whole specimen	75% EtOH
	Leg	Remove leg/s before fixing whole specimen in EtOH	100% EtOH
Pseudoscorpions	Whole specimen	Whole specimen	100% EtOH (pitfall trapped, then 75%)
Schizomids	Whole specimen	Whole specimen	75% EtOH **(if all legs missing then preserve in 100%)**
	Leg	Remove leg/s before fixing whole specimen in EtOH	100% EtOH
Large myriapods	Whole specimen	Whole specimen	75% EtOH
	Several walking legs	Remove leg/s before fixing whole specimen in EtOH	100% EtOH
Large molluscs	Whole specimen	Whole specimen	75% EtOH
	Tissue specimen	Remove tissue sample before fixing whole specimen in EtOH	100% EtOH
Small molluscs (e.g., micro-snails)	Whole specimen	Whole specimen	100% EtOH
Molluscs: dead	Whole specimen	Whole specimen	Dry
Crustaceans/Worms	Whole specimen	Whole specimen	>75% EtOH
	Tissue specimen	Remove tissue sample before fixing whole specimen in EtOH	100% EtOH
Insects	Whole specimen	Whole specimen	75-100% EtOH or pinned
Vertebrates	Tissue specimen	Remove tissue sample before freezing	100% EtOH

Table 3: Preservation of specimens for morphological and molecular purposes

Taxon Group	Instructions
Large Arachnids	• Remove third left leg at point of specimen death using clean, small scissors (minimally wash the scissors in water, and dry with clean paper towel between each specimen. Best practise is to wash tools in bleach for 30 secs, then rinse in water, then ethanol, in between sampling specimens). • Preserve legs in 100% EtOH, for lodgement in the WAM tissue collection. • Preserve whole specimen in 75%, for lodgement in the WAM wet collection. • Initially, preserve the whole specimen at a ratio of about 20 x fixative to tissue. Larger specimens may be injected with ethanol to facilitate preservation. Later the specimens can be transferred to smaller vials.
Pseudoscorpions	• Ideally preserve entire specimen in 100% EtOH. • If specimen has been collected via pitfall trapping or is in poor condition, preserve in 75%.
Schizomids	• Remove 2-3 left legs and preserve legs in 100% EtOH, for lodgement in the WAM tissue collection. Use clean scissors (minimally wash the scissors in water, and dry with clean paper towel between each specimen. Best practise is to wash tools in bleach for 30 secs, then rinse in water, then ethanol, in between sampling specimens). • Preserve whole specimen in 75%, (**unless it has no legs then preserve in 100%**) for lodgement in the WAM wet collection.
Myriapods	• Remove several legs from one side of the mid body and store in 100% ethanol. Use clean scissors (minimally wash the scissors in water, and dry with clean paper towel between each specimen. Best practise is to wash tools in bleach for 30 secs, then rinse in water, then ethanol, in between sampling specimens). • Preserve the rest of the body in 75% ethanol. • DO NOT sub-sample body segments. Millipedes have cyanide glands that can destroy tissue samples when segments are included in tissue samples for DNA analysis. • DO NOT sub-sample legs on terminal segment (these are diagnostic for many groups)
Molluscs (live)	• Some snails can be difficult to determine if live. Often, they have heavier, slightly darker shells with an epiphragm (sealed aperture). • When preserved, live snails often have shells containing a large mass of yellow or white tissue and will not float in liquid. • Whilst crawling, take a small (min. 5x5mm) piece of tissue from rear of foot using clean, small scissors or blade (wash the scissors in water, and dry with clean paper towel between each specimen. Best practise is to wash tools in bleach for 30 secs, then rinse in water, then ethanol, in between sampling specimens). Humidity may encourage snails to start crawling. • Place piece of foot in 100% ethanol • Now narcotise living snail to aid anatomical work, best achieved by drowning snail in cool tap water overnight (ca. 14 hours). Transfer to 75% EtOH. • For micro-snails, due to the difficulty in obtaining foot tissue, place snails into 100% ethanol. Care should be taken to cushion fragile snails from heavy labels.
Molluscs (dead)	• Dead molluscs often have fragile white translucent shells, more easily seen whilst wet or in preservative where they tend to float. • Please ensure dead-taken molluscs are completely dry before transferring to dry storage containers. • Care should be taken to cushion fragile shells from heavy labels.
Crustaceans/Worms	• Entire specimen to be preserved in 100% EtOH. • Stygobitic and troglobitic species will be stored frozen at WAM to increase viability of DNA sequencing over time (see Table 4). • Keeping specimens chilled in the field, both before and after preservation is desirable for subterranean fauna (especially small sized Bathynellacea, copepoda etc.). Larger crustaceans: remove leg from left side, or where possible (e.g., Parastacidae) take muscle tissue from abdomen and preserve in EtOH. Use clean scissors (minimally wash the scissors in water, and dry with clean paper towel between each specimen. Best practise is to wash tools in bleach for 30 secs, then rinse in water, then ethanol, in between sampling specimens). • Epigean/surface water species will be kept in the Wet Collection (see Table 4).

Insects	• Entire specimen to be preserved in 100% EtOH. • Specimens of interest can be stored frozen at WAM to increase viability of DNA sequencing over time (see Table 4). • For large specimens, several legs can be preserved in EtOH and stored in the frozen tissue collection. Such samples must be registered as a subsample of the specimen (same reg number). • Keeping specimens chilled in the field, both before and after preservation is desirable.
Vertebrates	• Entire specimen can be wrapped in absorbent paper towel, double bagged, frozen and then delivered to WAM frozen. If freezer is unreliable, take tissue specimen before freezing. • For live specimen (if you have Animal Ethics permit), ear clips (terrestrial mammals), biopsies (cetaceans), tail tips (reptiles) and toe clips (frogs) can be placed in 100% EtOH for submission.
Slide mounts	Prior to mounting on slides, a subsample should be removed for molecular processing, DO NOT submit temporary slide mounts to the Western Australian Museum. • Slides to be prepared as permanent mounts, to ensure long term storage (ring coverslip with clear nail varnish to seal). • Ring mounts should be used for animals that should not be compressed. • Subsamples and slides should be linked with the same registration number and data (including the type of mountant used). All labels should be affixed to the slide firmly. • Labels should be affixed to the slide according to Krantz & Walter and should include mountant used & registration number. DO NOT include identifications on the permanent label. • Please refer to this link for more information/advice relating to mounting specimens (specifically Crustaceans) http://invertebrates.si.edu/copepod/techniques.htm#microscopic. For detailed instructions on slide mounting of mites, see 'A manual of Acarology", 3rd edition, G.W. Krantz & D.E. Walter (eds) (2009), Texas Tech Univ. Press (Chapter 7: Collection, Rearing, and Preparing Specimens by D.E. Walter and G.W. Krantz).

4. Store specimens in correct vials and jars

Vial choice affects preservation quality and ultimate storage options. In the first instance, the correct choice of vial is essential to ensure that there is sufficient ethanol available to preserve the specimen. In the second instance, the use of standard-size vials means that the WAM can store specimens effectively. In short, you must use the right vial for the job. Where the WAM receives specimens in vials that are either: (a) the incorrect choice for a particular specimen; or (b) a non-approved vial type, your specimens will be returned to you for re-bottling.

a. The type of vial you choose depends on two factors:
    i. The collection destination:
        - Wet collection (room temp)
        - Tissue collection (-80° C freezer)
        - Dry collection (molluscs and insects)
    ii. The size of the specimen
b. Wet Collection specimens:
    i. Must be stored in **glass vials** (unless destined for the -80° C freezer).
    ii. The size of the vial depends on the size of the specimen.
        - Maximum: specimen = 1/2 of vial
        - Minimum: specimen = 1/3 of vial
    iii. See Table 4 for appropriate glass vial types
c. Tissue Collection specimens:
    i. Reminder: MUST be preserved in 100% EtOH.
    ii. Must be stored in **cryotubes**.
    iii. Must contain the appropriate WAM registration label.
    iv. Must NOT be stored inside the larger vial containing the specimen body.
    v. See Table 4 for cryotube details
d. Dry Collection specimens (Molluscs only - dry insects should be pinned, never stored in vials)
    i. Specimen must be dry (no moisture).

ii. Must be stored in plastic vials with lids.
iii. Fragile specimens must be protected by being placed into either a gelatine capsule or small glass vial within the plastic vial.
iv. See Table 4 for appropriate vial types.

Table 4: Guide to appropriate vial size and type

Specimen Size	Example of Specimen	Vial Type	Catalogue Code
Extremely small/ delicate specimen	Pseudoscorpions, schizomids, small examples of subterranean fauna, small crustaceans (e.g., copepods), small worms, delicate mollusc specimens, small insects	SAMCO Durham tubes soda glass 25 x 6.5mm The microvial should be stoppered with cotton wool and placed within the appropriate vial for that taxon.	SAMCO: G010/21
Small specimen	Millipedes, centipedes, small spiders, crustaceans, worms, small molluscs, small insects	SAMCO specimen tubes soda glass poly stopper 50 x 12mm	SAMCO: G050/20
Medium / multiple specimen(s)	Millipedes, centipedes, spiders, crustaceans, worms, molluscs, insects	SAMCO specimen tubes soda glass poly stopper 50 x 19mm	SAMCO: G050/26
Medium/ multiple specimen(s)	Millipedes, centipedes, spiders, crustaceans, worms, molluscs, insects	SAMCO specimen tubes soda glass poly stopper 75 x 19mm	SAMCO: G050/27
Large specimen	Mygalomorph spiders	SAMCO specimen tubes soda glass poly stopper 75 x 25mm	SAMCO: G050/29
Extremely large specimen	Large mygalomorph spiders, large insects	Glass jar	See below
Tissue Collection	All tissue collection specimens	Cryotubes, specifically 2 ml self-standing with external thread, no seal/washer. No fixed lid colour but must have lid inserts (provided with tubes) to enable labelling on lids. See: https://shop.gbo.com/en/row/products/bioscience/cryos-and-biobanking-tubes/cryos/126261.html Write label on both lid and side, Do not include a label inside tube.	Greiner Bio-one Cryo.S Clear lid: 126263 Blue lid: 126279 Yellow lid: 126278 Green lid: 126277 Red lid: 126280
Stygobitic or troglobitic crustaceans, worms & insects	WAM stores these specimens in a freezer to prevent DNA degradation. Specimen should still be placed inside a microvial to protect from being damaged by labels. Surface dwelling specimens will still be kept in our wet collection and should be kept in SAMCO specimen tubes.	Cryotubes, specifically 2 ml self-standing with external thread, no seal/washer. No fixed lid colour but must have lid inserts (provided with tubes) to enable labelling on lids. See: https://shop.gbo.com/en/row/products/bioscience/cryos-and-biobanking-tubes/cryos/126261.html The microvial should be stoppered with cotton wool and placed within the appropriate vial for that taxon.	Greiner Bio-one Cryo.S Clear lid: 126263 Blue lid: 126279 Yellow lid: 126278 Green lid: 126277 Red lid: 126280
Dry Collection: Small (Molluscs only)	Mollusc dry shell remains (no animal)	6-dram plastic vial with push on lid	Silverlock VP1040 CL1
Dry Collection: Large (Molluscs only)	Mollusc dry shell remains (no animal)	12-dram plastic vial with screw lid	Silverlock VP1070 CL11
Dry Collection: Delicate (Molluscs only)	Mollusc dry shell remains (no animal)	Gelatine Capsules 7.5mm x 20 mm, inside 6- or 12-dram plastic vials Or SAMCO Durham tubes soda glass. Microvial should be stoppered with cotton wool and placed within the appropriate vial for that taxon.	Aust. Entomological Supplies E966-1000

NB. SAMCO vials supplied through Australian Entomological Supplies

Glass Jars

Glass jars for larger specimens are available from Cospak which can provide 125 ml (H1146) and 250 ml (C250J) jars with plastic lids (and inserts). Ensure that the plastic insert is added to the 250 ml lid when bottling as this reduces evaporation. Cospak (see https://www.cospak.com.au/Glass-Bottles-_and_-Jars/pl.php?filters=CapacityRange:101%20-%20250|).

5. Label vials with "Specimen Information Label"

Specimen labels are integral to museum collections – they are a record of all data associated with a specimen. If you separate a specimen from its data, then both become useless. Consequently, it is extremely important that labels both: (a) contain all required information in a readable format; and (b) withstand storage in ethanol. If your labels do not adhere to WAM guidelines, specimens will be returned to you for correction.

For terrestrial vertebrates, please obtain TV field numbers prior to commencing fieldwork, or use you own unique identifiers that will be replaced by WAM registration numbers after accession. Tissue labels can be written on acid free paper with graphite pencil, placed within the tissue vial.

a. Each vial must contain:
    i. WAM registration number label
    ii. Specimen information label
    iii. Ethanol concentration label
b. A template for the specimen information label is available on the website.
c. Materials:
    i. Paper: uncoated, acid-free, "Tablex White, 245 GSM"
    ii. Paper supplier: Paperboys, craig@paperboys.com.au
d. Where labels are handwritten, please use one of the following pens:
    i. Indian ink in a "Rotring" pen
    ii. Archival ink in a "Sakura" brand "Pigma Micron" pen
e. To physically produce labels:
    i. Cut Tablex paper to A4 size
    ii. Print labels onto paper using a laser printer
    iii. Bake paper in an oven at 100°C for 20-30 minutes. The matt printing will become glossy when it is baked enough (don't burn the paper though – it should stay white). Or at 200°C setting on pre-warmed microwave for 3 mins.
f. Specimen information label guidelines
    i. Maximum size: 30mm x 10mm
    ii. Arial 4.5 font
    iii. Maximum of five lines of text
    iv. Label information:
        - State (e.g., "W.A.")
        - A reference to an Australian gazetteer place name (http://www.google.com.au/maps).
        - Latitude and Longitude in DD°MM'SS.SS" format. Seconds may go up to two decimal places.
        - Specify the datum (e.g., WGS84, GDA94)
        - Dates with month spelled out in letters and with the year in full, for example, "24 May 2013" or "24 Sept. 2013".
        - Collector names
        - Collecting method
        - Habitat description
        - Collector's unique ID code
    v. **DO NOT do the following:**
        - **Do not** include an identification on the locality label, as this identification may change.
        - **Do not** double space the text
        - **Do not** put borders around the text
        - **Do not** use numbers to record the month – this causes confusion between US and Australian date formats. Always write the month in letters.
    vi. Please see example labels below:

Example:

W.A.: Mesa Y-09, ca. 64 km SSW. of Pannawonica
25°18'23"S 117°51'03"E (WGS 84)
14 Dec. 2007 – 5 Jan. 2008
J.A.Brown, T.R.Smith (PS20120201.SFJSRE03-01)
troglofauna trap, -10 metres

In its final size the main label looks as follows (you may use the text below as a template):

W.A.: Mesa Y-09, ca. 64 km SSW. Pannawonica
25°18'23"S 117°51'03"E (WGS 84)
14 Dec. 2007 – 5 Jan. 2008
J.A.Brown, T.R.Smith (PS20120201.SFJSRE03-01)
troglofauna trap, -10 metres

6. Prepare electronic data in spreadsheet

It is imperative that your data spreadsheet is correctly formatted and that you complete all the required fields. Although it might seem as if some of our guidelines for completing your data spreadsheet are very exact, this is because: (a) the WAM databases cannot accept incorrectly formatted data – if your datasheet contains errors, WAM databases will simply not accept it; (b) incorrectly completed data spreadsheets can compromise the integrity of WAM databases (e.g., if you misspell a species name it will not show up in future searches for this species). We will not accept projects until we have received data in an acceptable format. If you are unsure about any aspect of preparing your electronic data submission, please contact the relevant WAM staff member.

a. Taxon-specific spreadsheet templates may be found on the submission page of the website. These spreadsheets contain:
    i. Information on which fields must be completed (see fields highlighted in yellow)
    ii. Information on character limits for each column.
b. Detailed formatting instructions for each database are also available on the submission page of the website.
c. Ensure that your "SITE" field relates your site to a gazetteer site (available at http://www.google.com.au/maps). For example, "Site X, ca. 8 km W. of Newman".
d. If in doubt, please email or call the relevant WAM staff member for advice on preparing your electronic submission.

7. Obtaining WAM registration numbers

Contact the relevant WAM staff and submit your data spreadsheet(s) for the project with a request for WAM registration numbers. If there are no major problems with your spreadsheet then the reg. nos will be assigned.

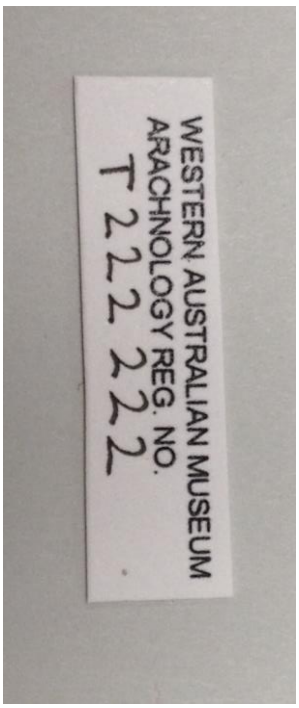
For Entomological specimens (insects) registration numbers will only be supplied if the specimens are ready for immediate submission. Vertebrate specimen numbers (A# - Birds, M# - Mammals, and R# - Reptiles) are only assigned to specimens after they are fixed/preserved for the collection.

8. Put WAM registration number labels into vials

a. Receive the following materials from the WAM via email:
    i. a project number (for submissions of Molluscs and Crustacea/Worms)
    ii. Transfer of Custody form (please print in duplicate and submit with your specimens)
b. A template for the WAM registration label is available on the website.

c. Insert the WAM registration numbers into the label template. Put the following letter in front of the number as appropriate (these will be indicated in the spreadsheet you are supplied with):
    i. Arachnids/ Myriapods: T
    ii. Crustaceans: C
    iii. Molluscs: S
    iv. Worms: V
    v. Insects: E

d. It is imperative that the label be formatted as per the example below. There should be three lines of text and **the registration number itself should sit on its own line.**



e. Prepare your WAM registration number labels & label vials:
    i. Double-check your WAM registration number labels
    ii. Print labels and bake them as per Step 5 (e).
    iii. **Hand write** the WAM registration number using indelible ink
    iv. Using a guillotine, cut your labels into thin strips.
f. Place WAM registration numbers into the appropriate vials.
g. Implement your own quality control protocols to ensure that the right labels have been placed in the right vials. That is, that the combination of labels in each vial match the information in the data spreadsheet for the project. Ensure that the registration label can be clearly identified through the vial and is not obscured by other labels.
h. Email the relevant WAM staff member to determine your intended delivery day and time.
i. **NB: WAM registration numbers will only be given for set projects.**

9. Package and deliver your specimens

It is very important that specimens are packaged appropriately. ***Vials should be arranged IN ORDER in boxes****. Neglecting to package vials properly leaves you open to the risk of: (a) your specimens becoming damaged in transit; (b) your project being delayed due to specimens being out of sequential order.*

j. Vials should be packed in the following box types:
    i. Wet collection specimens:
        - Cardboard “cryovial storage boxes” with “internal cardboard dividers”.

- These are stocked by nearly all scientific suppliers.
- *Example supplier: http://molecularsolutions.com.au/freezer_boxes.html*

ii. Tissue collection specimens:
- Cardboard cryotube boxes
- These are stocked by nearly all scientific suppliers.

k. You should separate out taxonomic groups into different boxes as follows:
   i. Arachnids/ Myriapods
   ii. Crustaceans
   iii. Worms
   iv. Molluscs
   v. Terrestrial Vertebrates
   vi. Tissue specimens (separate box for each taxonomic group)

l. **Vials should be arranged in each box in sequential order of the WAM registration number.**

m. Label all boxes with the following details:
   i. Project number (this will be your consultancy number, or, for Molluscs and Crustacea/Worms, the number provided by WAM)
   ii. Taxon group
   iii. Consultancy

n. Please package these boxes in an appropriate protective covering (e.g., a padded envelope). This prevents damage to the specimens and keeps different parts of your submission together.

o. Print your Transfer of Custody form in duplicate, fill in the appropriate fields and include the two copies with your submission.

p. Specimens should be delivered using the following details:
   i. Contact: the relevant WAM staff per animal group.
   ii. Street Address: 49 Kew St, Welshpool DC, WA, 6986.
   iii. Postal Address: Locked Bag 49, Welshpool DC, WA, 6986.

q. Please deliver in person or use a courier service.
   Deliveries are only accepted during WAM reception opening hours (8:00am-4:00pm).

10. Project progress and delivery of outcomes

If Museum staff agree to undertake the project, they will commence work and will work towards a final report depending on other duties. When your report has been completed you will receive an email notification.

r. Once your project has been received, the following steps will occur:
   i. Your submission will be checked for adherence to museum guidelines.
   ii. Quality control protocols will be implemented to ensure that your electronic data matches specimen labels.
   iii. If there are issues with your submission, WAM staff will contact you to explain the problems and to arrange a time for you to pick up your specimens. You will then need to correct the problems and resubmit your project.
   iv. Please note that resubmitted projects will go to the end of the queue when lodged for the second time.
   v. For this reason, if you are at all uncertain about aspects of your submission, PLEASE CONTACT WAM STAFF PRIOR TO SUBMITTING YOUR PROJECT. Discussion beforehand can solve these issues pre-emptively and easily. Please note that time spent responding to multiple queries by staff will slow the process, check the guidelines yourself before contacting WAM staff.

s. The time it takes to complete a project depends on a number of factors:
   i. Current WAM departmental workload at the museum.
   ii. Quality of the submission (e.g., if submissions adhere to the guidelines, then the rest of the process will have fewer hold-ups).
   iii. Quality of the specimens (e.g., damaged specimens are more difficult to identify).

iv. Taxonomic diversity contained within the project (projects with high levels of taxonomic diversity and/ or new genera/ species are more complex and take more time to complete).

t. Invoicing:
    i. Invoices for Area Searches and Molecular Identification reports will be provided.

Submission Checklist

1. Fix/ store specimen in field as appropriate:
    - 100% EtOH
    - 75% EtOH
2. Sort specimens in the lab according to:
    - Broad taxonomic group
    - Collection method
    - Microhabitat
3. Prepare and preserve specimens
    - Arachnids/ Myriapods
    - Crustaceans/ Worms
    - Molluscs
    - Insects
    - Terrestrial Vertebrates
    - Other
4. Store specimens in correct vials
    - **Cryovials** (tissue collection)
    - **Glass vials** (wet collection)
5. Label vials with "Specimen Information Label"
    - Produce location labels
    - Print and bake labels
    - Insert labels into vials
6. Prepare electronic data in spreadsheet
    - Insert data into the template
    - Format entire spreadsheet as text
    - Check formatting against guidelines, paying attention to character limit
7. Obtain registration numbers from relevant WAM staff member
8. Add WAM registration numbers to vials
    - Print and bake WAM registration labels
    - **Hand write** the WAM Registration numbers using indelible ink
    - Insert labels into vials
    - Implement quality control protocols
9. Package and deliver your specimens
    - Separate vials into different taxonomic groups
    - Pack vials into appropriate box, in sequence
    - Print Transfer of Custody form in duplicate, and sign for each WAM section
    - Package boxes and Custody forms in a padded envelope/ box
    - Hand deliver/ Courier