Information for the Future: An Analysis of Shipwreck Artefact Records in South Australia

Cassandra Morris, Master of Maritime Archaeology

A thesis submitted in partial fulfilment of the requirements for the Master of Maritime Archaeology Degree, Department of Archaeology, Faculty of Humanities, Flinders University of South Australia, June 2012.
# TABLE OF CONTENTS

List of Figures .................................................................................................................................. iv
List of Tables ...................................................................................................................................... vi
Abstract ............................................................................................................................................. vii
Declaration ......................................................................................................................................... viii
Acknowledgements ........................................................................................................................... ix
Abbreviations ..................................................................................................................................... x

1 Introduction ..................................................................................................................................... 1
  1.1 Shipwrecks and Museums ...................................................................................................... 1
  1.2 Aims ...................................................................................................................................... 2
  1.3 Significance ........................................................................................................................... 3
  1.4 South Australian Museums .................................................................................................... 4
  1.5 Thesis Structure ..................................................................................................................... 4
    1.5.1 Chapter 2: Background Information and Previous Research ......................................... 4
    1.5.2 Chapter 3: Methodology .............................................................................................. 5
    1.5.3 Chapter 4: Results ........................................................................................................ 5
    1.5.4 Chapter 5: Discussion ................................................................................................... 5
    1.5.5 Chapter 6: Conclusion .................................................................................................. 6

2 Background Information and Previous Research ...................................................................... 7
  2.1 Museums and Collecting ........................................................................................................ 7
  2.2 Shipwreck Legislation in Australia ......................................................................................... 9
    2.2.1 Commonwealth Legislation .......................................................................................... 9
    2.2.2 South Australian Legislation ....................................................................................... 11
  2.3 Museums in South Australia ................................................................................................ 12
  2.4 Collection Management Policies .......................................................................................... 14
  2.5 Charters, Codes, Conventions and Policies ............................................................................ 19
    2.5.1 CAN, Collections Council Australia, and Museums Australia Inc. .............................. 20
    2.5.2 ICOM .......................................................................................................................... 21
    2.5.3 ICOMOS ..................................................................................................................... 22
    2.5.4 UNESCO ..................................................................................................................... 22
  2.6 Previous Research ................................................................................................................... 23
    2.6.1 International Research ............................................................................................... 23
    2.6.2 Research on South Australia’s Shipwrecks .................................................................. 24
    2.6.3 Research Influences ................................................................................................... 25
  2.7 Summary .................................................................................................................................. 26

3 Methodology ................................................................................................................................... 28
  3.1 Stage One—Museums Database ............................................................................................ 28
  3.2 Stage Two—Field Trips .......................................................................................................... 31
LIST OF FIGURES

Figure 1: Museums containing shipwreck artefacts in South Australia. ..............................................................30

Figure 2: Museums containing shipwreck artefacts in South Australia. Field trips were taken to museums over several months. See Table 1 for specific museums visited..........................................................34

Figure 3: Screenshot of Database, in 'Form' view..............................................................................................37

Figure 4: The results from the artefact record archaeological rating analysis. 93% (598) of records were rated C; 6% (37) of records were rated B; and 1% (10) records were rated A.................................................................48

Figure 5: Results from the CMP Rating analysis. 1% (10) of records were rated level '1'; 12% (75) of records were rated level '2'; and 87% (560) of records were rated level '3'. ......................................................50

Figure 6: Results from the Artefact Record Category analysis. Each column represents the number of records without information in each major field. Exact numbers are included at the base of each column. ........................................................................................................................................54

Figure 7: Graph shows the percentages of register fields without information, created from the Museum Category Average analysis........................................................................................................55

Figure 8: The percentage of donated artefacts as compared to scientifically excavated (archaeologically recovered) artefacts, currently on display in South Australia........................................57

Figure 9: Chart showing the number of records within this research's database, included/not included on the DENR Relic Report. 645 records have been included in the database. .........................61

Figure 10: Chart showing the number of records within this research's database, included/not included on the DENR 2009 Audit. 645 records have been included in the database...............61

Figure 11: Chart showing the number of records within this research's database, included/not included on the DENR Relic Report and 2009 Audit. 645 records were included in the databases. .................................................................................................................................62

Figure 12: Mural on the Port MacDonnell Community Hall in Charles Street. Photo: C. Morris 66

Figure 13: An excerpt from an object recording form included in this research. The recorder was obviously unable to understand how these points could be answered, when writing about a shipwreck artefact. Photo: C. Morris.................................................................68

Figure 14: A ship's binnacle from Songvaar (1912) with attached labels describing the recovery of the item. This label information is not recorded within the Register, along with the wreck name and
LIST OF TABLES

Table 1: Museum Field Trips undertaken to 18 of the 23 museums. Each trip location is provided, followed by the specific museums visited. Colours correspond to Figure 2. ........................................ 34

Table 2: CMP and archaeological method classification system details. ...................................... 43

Table 3: Museum Guide—This table gives the museum number assigned for the purpose of this research, the name of the museum and the number of artefact records investigated. ....................... 46

Table 4: Table showing the 10 artefact records and their corresponding museums that were rated 'A'. Those highlighted in yellow indicate that the record is listed in both Archaeological and CMP Rating 'A/1' lists. ............................................................................................................................... 48

Table 5: Table showing the 10 artefact records and their corresponding museums rated level '1'. Those highlighted in yellow indicate that the record is listed in both Archaeological and CMP Rating 'A/1' lists. ....................................................................................................................................... 50

Table 6: Museum ratings compiling the average Archaeological and CMP Rating. Highlighted museums and CMP ratings show the level 1 and 2 museums as well as the next two closest museums, determined by average. .................................................................................................................... 52

Table 7: A detailed look at each museum and where Register areas, on average, are missing or contain information. M16 (highlighted yellow) keeps no register, whereas M15 and M17 (highlighted green) on average have perfect recording. M19 note that there were an equal number of records with/without Accession data. ............................................................................................................ 56

Table 8: Breakdown of Donated and Archaeologically recovered artefacts. Note the second listing of 'Salvage', included due to lack of donation or loan clarification. .................................................... 59
ABSTRACT

South Australia has numerous shipwrecks, material from which is currently displayed across the state in many different museums. Analysing the register entries for these artefacts, this thesis studies the quality and quantity of information recorded. Across 23 museums data was collected in person, via email and mail and resulted in 645 artefacts recorded and discussed. These artefacts were loaded into a specially designed database system, developed from the museum registers themselves. Records were compared against each other, in addition to collection management policies, and archaeological standards. This comparison illustrated a distinct need for improvement within museum register recording. Main areas of improvement include further details recorded within registers, the necessity to document the artefact's story as opposed to just the ship's history, the computerisation of registers across South Australia, and the implementation of standardisation throughout Australia. These results demonstrate that South Australia is a step behind other museums, both within Australia and globally, in terms of implementing new technology and standardisation.
DECLARATION

I certify that this work does not incorporate without acknowledgement, any material previously submitted for a degree or diploma in any university, and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Cassandra Morris

May, 2012
ACKNOWLEDGEMENTS

This thesis would not have been completed if it were not for the kindness, understanding and patience of all the curators, managers and volunteers of all the museums I contacted. So to them I give my heartfelt thanks, especially those that had to sort through their registers at my request. Also, I thank the National Trust of South Australia and History SA for their help.

Thanks must also go to Amer Khan and the Department of Environment and Natural Resources who suffered a steady stream of emails asking for assistance with contacts, who allowed me to access what was on file, and who gave me a number of other small insights into South Australia and its shipwrecks.

To the Australasian Institute for Maritime Archaeology (AIMA) for awarding me a scholarship in order to drive across the state to visit as many museums as possible.

To my supervisor, Wendy van Duivenvoorde, who gave me a completely different idea to begin with, which I twisted and changed as I went. You have been a wonderful guide throughout this time, supported me without giving me the answers, and confirming all my suspected horrors with a smile. Thank you for everything you’ve done, and the help you provided.

To Danielle Wilkinson who at the last minute became my proof editor from several states away, despite writing her own thesis at the time.

Most importantly to my parents, for everything, and to my husband Dustin. Thanks for putting up with me and for your support and love.
ABBREVIATIONS

ANCODS—Australia and the Netherlands Concerning Old Dutch Shipwrecks

CAMM—Council of American Maritime Museums

CAN—Collections Australia Network

CHIN—Canadian Heritage Information Network

CMP—Collections Management Policy

Cmw—Commonwealth. Indicates origin when used after legislation

DENR—Department of Environment and Natural Resources (SA Government)

ICMM—International Congress of Maritime Museums

ICOM—International Council of Museums

ICOMOS—International Council on Monuments and Sites

MAAWA—Maritime Archaeology Association of Western Australia Inc.

NTSA—National Trust of South Australia

PANM—Port Adelaide Nautical Museum

SA—South Australia. Indicates origin when used after legislation

SAM—South Australian Museum (North Terrace, Adelaide)

SAMM—South Australian Maritime Museum (Lipson St, Port Adelaide)

SCUBA—Self Contained Underwater Breathing Apparatus

UNESCO—United Nations Educational, Scientific, Cultural Organisation

VMC—Virtual Museum of Canada

WA—Western Australia. Indicates origin when used after legislation

WAM—Western Australian Museum
1 INTRODUCTION

“Museum collections should be documented according to accepted professional standards. Such documentation should include a full identification and description of each item, its associations, provenance, condition, treatment and present location.”


1.1 Shipwrecks and Museums

Australia has numerous museums dedicated to maritime endeavours, specific shipwrecks, or simply to early histories of port towns—shipwrecks and museums are practically synonymous. More than 6000 ships met their demise off the Australian coast and came to rest in its water ways, some of which have been located and others still eluding identification (Kenderdine, 1997:7; Luxford, 2006:300-307; Staniforth, 1993:216; Staniforth and Nash, 2006:127). These shipwreck sites and their artefacts are of interest to the public and have significant value to Australian history.

Recent events such as the debate surrounding the “Tang Treasures and Monsoon Winds” exhibit and the discussion of what is thought to be Queen Anne’s Revenge have brought maritime archaeology and museums to the forefront of the public’s attention (Allsop, 2011; ArtInfo, 2011; Blair, 2011; Booth, 2011; Drye, 2011; Flecker, 2008, 2001, 2000; Lawerence and Wilde-Ramsing, 2001; Lusardi, 2000; Meide, 2011; Mellman, 2011; Perloff-Giles, 2011; Pringle, 2011a, b; Smithsonian Institution, 2011, 2010; Suyono and Maksum, 2011; Taylor, 2011a, b; Trescott, 2011; Wertheimer, 2011). Australia is currently lacking controversial finds or debates, but
the discussions held worldwide have raised questions related to museum management and maritime archaeological conduct. This study's original focus, analysing certain shipwreck artefacts that question museum ethics, was inspired by various aspects of the two aforementioned debates. Despite altering the aims of this research early on, these debates are quite relevant, demonstrating media coverage and public opinions of archaeology.

People have collected articles from a wide range of shipwrecks in all manner of ways. It is the archaeological method to record every piece of information available, as it may not always be there. However, artefacts recovered by the public, quite often have little information recorded by the collector. Therefore, the recording of any available information falls to museum personnel when an item is donated. This thesis focuses on what museum personnel record when accessioning shipwreck artefacts and whether they relay information on the material’s provenance and retrieval from the seabed. Divided into two sections, this research collates museum collection management policies, museum exhibits with shipwreck artefacts currently on display, and museum register records; and comprises a compilation of data, analysing the amount of information recorded in museum registers, identifying archaeologically and unscientifically recovered material, and advising areas of improvement from an archaeological viewpoint.

1.2 Aims

This study investigates how artefacts were recovered from shipwrecks and made their journey to the museum. The following three research questions aid in the
study of this process:

1. What percentages of shipwreck artefacts, currently on display in South Australian museums, have been scientifically recovered? If not recovered within the scientifically acceptable parameters, how have they been retrieved?

2. What level of detail are South Australian museums recording when accessioning shipwreck artefacts into their collections? Does this meet museum Collection Management Policy requirements and/or accepted archaeological method suggestions?

3. Are there individual fields that are regularly missing information in museum registers? How much information recorded relates to the provenance of the item specifically?

Through these questions, this thesis sets out to answer exactly what shipwreck artefacts are on display in South Australia, how these artefacts made their way into museums and what information is recorded regarding their provenance.

1.3 Significance

To date, little research data is available on maritime archaeological material in Australian museums. This thesis is, therefore, significant for future and current maritime archaeological research, museum studies, and cultural heritage management. This study does not investigate museums worldwide, but demonstrates practices in South Australia in 23 metropolitan and rural museums, as a representative case study within Australia. It includes all museums within South Australia that have shipwreck artefacts currently on display. While some only have one maritime archaeological item in their entire collection, inclusion is necessary to highlight differences between museums with one artefact and those dedicated to shipwrecks.
During the Australasian Institute for Maritime Archaeology 2011 Conference held in Brisbane, Queensland, this research idea was presented to conference attendees. Feedback and suggestions were made at that time as well as an overall expression of interest into the results.

1.4 South Australian Museums

Twenty-three museums in South Australia identified to date—ranging from dedicated maritime museums to community displays—hold maritime-related artefacts in their collections. The majority of these museums are incorporated on the Collections Australian Network website (Collections Australia Network, n.d.) and the National Trust of South Australia website (National Trust of South Australia, n.d.-c). Some museums, however, are only included on their own websites or via business locaters, such as Google maps. While every attempt was made to include and assess all museums in South Australia, some may have been unintentionally missed—their collections thus being excluded from this study.

1.5 Thesis Structure

1.5.1 Chapter 2: Background Information and Previous Research

This chapter outlines the history of key aspects of this thesis and discusses previous research related to the topic. Addressed is the history of museums and collecting, shipwreck legislation, museums in South Australia, museum collection management policies, and other museum legislation. Publications from museology, archaeology and the media have been included. Furthermore, this chapter provides an overview of shipwreck studies in South Australia. It must be noted that no in-depth studies
exist of what is actually on display in museums, highlighting the scholarly value of this thesis.

1.5.2 Chapter 3: Methodology

The methodology chapter discusses the data collection phase of this research, and the tasks undertaken to ensure a comprehensive study. Firstly, it outlines the collation of a museum database. Secondly, the collection of data in the form of photographs, collection management policies, and museum registers resulted from several field trips to visit state museums. An explanation of how records were created in an artefact database follows. Lastly, this chapter includes an explanation of the assessment of museum registers in order to gather data. It essentially demonstrates how data was collected from museums and documents.

1.5.3 Chapter 4: Results

Chapter 4 summarises the results of the data collected for this thesis. From this data, for example, statistics were extracted and discussed providing the ratio of artefacts recovered in an uncontrolled fashion to those retrieved more scientifically. Other information, including the level of recorded detail about objects is also detailed in this chapter.

1.5.4 Chapter 5: Discussion

The results, outlined in the previous chapter, are discussed here. Each of the research questions are addressed, as well as summarising the problems encountered with registers. Recommendations are given in response to the results.
1.5.5 Chapter 6: Conclusion

Chapter 6 concludes the thesis and summarize the findings of the study. It offers an overall perspective on the topic and draws all points raised within the study together.
2 BACKGROUND INFORMATION AND PREVIOUS RESEARCH

2.1 Museums and Collecting

In the 16th and 17th centuries, aristocracy, as well as middle classes, dedicated rooms in their houses to exhibit and store the wonders of the natural world. Collectors displayed their items to family and friends for their enjoyment while reinforcing their own sense of wealth and intellectual enlightenment (Edson and Dean, 2003:145). Over time, the rooms further developed into art galleries and natural history museums. It was private collectors whom, with their interest in the natural world, created these ‘museums’ and allowed aristocracy and middle-classes access, albeit at the whim of the owner (Edson and Dean, 2003:145). The Ashmolean Museum, opened by the University of Oxford in 1683, is thought to be the first public museum (Boylan, 2004:2).

Maritime museums are more recent occurrences. Michael McCarthy (2011:1042-1045) suggests that they originate in naval museums, created by navies in search of their past experiences. From these collections of weaponry, trophies of war, boats and related articles, small naval museums were opened with varying success. McCarthy also notes that the collectors of the 1950s and 1960s added to the maritime museum’s legacy by collecting items from merchant, trade, whaling, immigrant, and colonial vessels. In South Australia this theme of collecting is evident in one of the oldest nautical assemblages in Australia, the Port Adelaide Nautical Museum (PANM) collection (History SA, 2003a). This assemblage began as part of the Port Adelaide Institute, made up of various local and international
seafarers’ collections and curios. Originally established in 1872, the institute was reshaped into the Port Adelaide Nautical Museum in 1933 (History SA, 2003a). The South Australian Maritime Museum (SAMM) held this collection in trust from its establishment in 1986, until the early 2000s when the Port Adelaide-Enfield Council officially transferred the rights (Jateff, E. 2011 pers. comm).

Collecting is a common theme throughout the development and history of museums. This theme has been subject to change in recent years due to the introduction of legislation, mostly focused on protecting cultural history and its associated artefacts. In terms of divers collecting items off of shipwrecks, it seems only a natural progression with the introduction of readily available Self Contained Underwater Breathing Apparatus (SCUBA) in the 1950s. An interest in shipwreck material, and nautical material in general, was renewed (Hosty and Stuart, 1994:10) and coincided with the collecting phase as aforementioned by McCarthy (2011:1043). SCUBA has now enabled divers to enjoy and collect items from underwater sites, previously inaccessible to humans (Staniforth, 1993:216).

Shipwreck artefact collecting in Australia was brought to a point of contention after the suspected looting of the early European Batavia (1629) and Vergulde Draak (1656) sites in 1963 (Green, et al., 1998:30-36; Hosty and Stuart, 1994:10; Staniforth, 1993:217). These shipwreck sites, along with those of Trial (1622), Zuiddorp (1712), and Zeewijk (1727), then became the focus of the Western Australian Museum’s (WAM) efforts for the protection of shipwrecks (Green, et al., 1998:31; Staniforth, 1993:217). With substantial assistance from MAAWA (Maritime
Archaeology Association of Western Australia), WAM urged the state government to create legislation to protect these shipwrecks, resulting in an amendment to the Western Australian Museums Act 1959, approved in 1964. This amendment was the first of its kind in Australia, protecting the shipwrecks for the benefit of the public (Green, et al., 1998:31). However, there were many problems with this new legislation. A new Museum Act was enacted in 1969 including the provisions of the 1964 amendments, with mixed reactions. With questions to the validity of the act, the WAM removed the historic shipwrecks provisions from the Museums Act 1969 and a new state act was enacted; the Maritime Archaeology Act 1973 (Hosty, 1986:21-22).

2.2 Shipwreck Legislation in Australia

2.2.1 Commonwealth Legislation

Prior to the endorsement of the Maritime Archaeology Act 1973, the agreement between Australia and the Netherlands Concerning Old Dutch Shipwrecks (ANCODS) was signed in 1972 (Commonwealth Government of Australia, 2011). This agreement passed all rights from the Netherlands government, as the inheritor of the Dutch shipwrecks, to the Australian Government provided that a continued interest in the sites remained (Commonwealth Government of Australia, 2011 Schedule 1). ANCODS is now included under the Commonwealth Historic Shipwrecks Act 1976, which was introduced soon after the infamous Robinson vs The Western Australia Museum court case (Green, et al., 1998:34-36; Hosty, 1986:21-22; Hosty and Stuart, 1994:11-12; Ocean's Society of Australia, 1977:28-30; Staniforth and Hyde, 2001:234; Staniforth and Nash, 2006:125). Western Australia was the first to
accept this Commonwealth legislation on September 3rd, 1977, and was followed within five years by all other states (Staniforth and Nash, 2006:125). This legislation protected historic shipwrecks within commonwealth waters, although a lengthy process had to be undertaken (Rodrigues, 2009:154). The shipwreck had to be discovered and reported, the later then was forwarded to the Minister for appraisal (Rodrigues, 2009:154; Staniforth and Hyde, 2001:234). It was then, if found to be significant, declared an historic shipwreck under the Act by the Minister (Rodrigues, 2009:154; Staniforth and Hyde, 2001:234). This process was improved with the enforcement of blanket protection in 1993.

Although several small amendments have occurred to the Historic Shipwrecks Act 1976, the most important change is the 1993 declaration of blanket protection (Kenderdine, 1997:16; Staniforth and Nash, 2006:126). This addition meant that all shipwrecks older than 75 years, located or not, were now protected. This prevents diver interference of shipwrecks in the time between the finding and the declaration of the ship to be historic (Rodrigues, 2009:154; Staniforth, 1993:219).

Another important aspect of the Historic Shipwrecks Act 1976 is the amnesty announced in 1993, coinciding with the amendment for blanket protection. This amnesty gave the public six months, later extended by five months, to declare any artefacts from protected shipwrecks without fear of prosecution (Rodrigues, 2009:154-155). Any artefacts declared would be recorded and returned to their custodians (once a relic had fallen under the Act, owners became their custodians) (Kenderdine, 1997:16; Rodrigues, 2009:154-155). The amnesty also included
reporting shipwreck sites (Rodrigues, 2009:155). Although the amnesty was reliant on the publicity of dive shops, clubs and magazines, approximately 20,000 artefacts were declared nationwide (Rodrigues, 2009:155; Staniforth, 1993:221). Little further research has been conducted on these artefacts bar Jennifer Rodrigues' 2011 PhD Dissertation (Rodrigues, 2011; Rodrigues, 2009; Steel, 2009). This amnesty is of particular importance to this study, as some artefacts may have been listed under the amnesty and later donated to a museum.

As of 2009, the *Historic Shipwrecks Act 1976* has been under review (Commonwealth Government of Australia, 2010) and a consideration of the requirements of the UNESCO 2001 *Convention on the Protection of the Underwater Cultural Heritage* is currently underway. Another piece of Commonwealth legislation is the *Protection of Movable Cultural Heritage Act 1986*. This has some control of shipwreck materials under Section 7.1:

“…objects that are of importance to Australia, or to a particular part of Australia, for ethnological, archaeological, historical, literary, artistic, scientific or technological reasons, being objects falling within one or more of the following categories: (a) objects recovered from: (i) the soil or inland waters of Australia; (ii) the coastal sea of Australia or the waters above the continental shelf of Australia; or (iii) the seabed or subsoil beneath the sea or waters referred to in subparagraph (ii);“ (Commonwealth Government of Australia, 1986)

This act aids the control of foreign, illegally obtained artefacts in Australia, allowing the country of origin to request assistance in seizing the material.

### 2.2.2 South Australian Legislation

Shipwreck legislation in South Australia was introduced in 1981. South Australia’s *Historic Shipwrecks Act 1981* was revised in 2005 to mirror its Commonwealth
counterpart, including the declaration of blanket protection and a 75-year rolling date. Prior to this, the South Australian *Historic Shipwrecks Act 1981* was applied on a case-by-case basis—shipwrecks underwent an application for protection, followed by a waiting period before success—similar to the *Historic Shipwrecks Act 1976*. During the five years between the introduction of Commonwealth then State legislation, some confusion was encountered by divers. Knowledge of which shipwrecks were under protection was limited, in addition to an insufficient understanding of Commonwealth/State water boundaries (Anderson, R. 2011 pers. comm.).

### 2.3 Museums in South Australia

South Australian Museums are numerous and have a variety of focuses. The state boasts one of the oldest museums in Australia, the South Australian Museum. Formally the South Australian Institute Museum, it was originally formed through the South Australian Literary Association in London, 1834 (South Australian Museum, 2004; Staniforth and Nash, 2006:151-152). However, it was not until 1861 that a museum and library complex was built, although a rented property had been in use since 1856 (South Australian Museum, 2004). Since 1861, numerous additions have been made to the structures and collections—the latter now being the “largest Australian Aboriginal cultures collection in the world” (South Australian Museum, 2004).

South Australia also boasts another long standing collection; the Port Adelaide Nautical Museum Collection. As mentioned afore, it is currently housed within the
South Australian Maritime Museum (SAMM) and is one of the oldest nautical collections in Australia (History SA, 2003a). SAMM became the trustees of the collection in 1986, after the Port Adelaide Institute (owners of the collection) suffered financial trouble during the 1970s (Jateff, E. 2011 pers. comm; Page, 1981:203-213). The collection originated in 1872 when the librarian of the Port Adelaide Institute began gathering material for exhibits (Page, 1981:98-99). These exhibits were of various themes and origins ranging from Australian Aboriginal, Pacific Islander artefacts to mineral, faunal and floral specimens, together with a coin collection, mostly donated by seafarers and locals (Page, 1981:98-99).

Therefore, in 1927, it was proposed to convert the institute into a local Maritime Museum, following which, in 1933 the museum was cleaned out and reorganised:

"With the committee’s blessing, Smith set to work to sort out the contents on the museum, destroy all the specimens which had become useless,’ and give others away to such organisations as the Adelaide Museum. He retained only the items relating specifically to maritime history or to the history of Port Adelaide, and moved quickly to secure some objects such as ship’s figureheads which he knew to be available. The committee’s announcement of the re-organisation quickly attracted a number of relevant items from old seafarers or descendants of Port Adelaide pioneers.” (Page, 1981:163)

This collection is currently one of many held by the SAMM, the figurehead collection forming the largest assemblage in the Southern Hemisphere (History SA, 2003b).

Many other regional museums have opened within the last hundred years. Within South Australia, most are controlled by the National Trust of South Australia (NTSA), while others are simply private collections on display to the public or collections controlled by local government. NTSA was introduced through the National Trust of
South Australia Act 1955 and since then has acquired 28 nature reserves and over 100 historic buildings, approximately half of which are now museums or historic period displays (National Trust of South Australia, n.d.-a). Many of these buildings were developed into museums simply due to the local need to store and display items and public interest in the local areas, as well as conserving and protecting the historic buildings themselves. Collections within the museums are generally focused on the local area’s history.

2.4 Collection Management Policies

A museum’s Collection Management Policy (CMP) dictates specific management guidelines to be followed. It sets the guidelines for acquisition, de-accessioning, lending, care, access, insurance and records as well as a general overview of the museum, its goals and other general comments (Malaro, 1995:11-12). Seven different collection management policies will be compared for this research: The National Trust of South Australia CMP, Axel Stenross Maritime Museum CMP, Swan Reach & District Museum CMP, Holdfast Bay History Centre CMP, Port MacDonnell Maritime Museum CMP, Whyalla Maritime Museum CMP and the History SA CMP.

Within the NTSA CMP, the ‘Acquisition’ article and, within that, the ‘Ethics’ section is of particular interest in this research. These demonstrate exactly the circumstance under which an item can be accessioned into the collection. When compared with advice in “The Handbook for Museums” (Edson and Dean, 2003:67-74) and “Collections Management Policies” (Malaro, 1995) all necessary fields are included. However, sections to note with relation to this research include: 2.4
'Provenance and Documentation’, specifically 2.4.1:

“Where possible the National Trust of South Australia only accepts to keep in the collection the cultural material that retains documentation of its provenance”

and 2.8 ‘Ethics’, specifically 2.8.1:

“The National Trust of South Australia will only acquire cultural material in accordance with State and Federal law and international agreements between Australia and other countries (eg UNESCO Convention on the Means of Prohibiting and Preventing the Illicit Import, Export, and Transfer of Ownership of Cultural Property or the Convention on International trade in Endangered Species).”

and 2.8.2:

“The National Trust of South Australia will not acquire cultural material known to have an illegal or unethical provenance. If after acquisition, legal or ethical problems become apparent, the National Trust of South Australia will take action to rectify the situation.”

Also of importance is the recording of information, 2.6 ‘Records’, 2.6.1 “The National Trust of South Australia will endeavour to record all known details of the history of all cultural material at the time of acceptance”. These sections portray a well organised and thought out museum guideline.

Comparatively, Axel Stenross Maritime Museum’s Acquisition Policy is lacking in detail. Of the six points within the policy only the fifth deals with records, documentation and provenance. This point gives a loose recommendation to record information: "It is important that the story about an item is noted at the time it is offered to the Museum, and that could involve additional documents, photographs or equipment." No mention of items with illegal or unethical provenance is made within the policy, which addresses the types of items which may be included into the collection. Within the wording of this point, the use of 'story' is surprising, and is
a flexible concept. Non-specific wording leaves room for interpretation which affects the recording process.

Swan Reach's CMP is of similar composition to Axel Stenross Maritime Museum CMP. Five points exist, detailing the collection focus, terms for successful acquisition and a disclaimer of sorts. Relevant to the documentation of artefacts is the third point stating that: "The item’s provenance is obtained in writing at the time of the item being offered to the Museum". This is a good clear approach to collecting information about items, and an assumption could be made that these are included with the register as letters or rewritten into the register itself. However, responsibility lies with donors to record information, not with museum staff, according to the policy. Volunteers not enforcing this requirement at the time of donation will result in little recorded information.

Holdfast Bay Historical Society has a short and simple Collection Management Policy. Little mention is made, however, of specific provenance and significance compilation. Those points that do relate to provenance, significance as well as documentation are unspecific. Three points address this need for artefact documentation, included under the subheading "Further criteria to be applied where objects meet any of the above criteria": "1. Extent of the accompanying documentation and provenance", "4. Relationship to other objects which reinforce its significance", and "6. The intending donor has legal title to the object". These points are worded difficultly, listed to assist in filtering objects through acquisition criteria quickly. However, worth mentioning is a guide to completing a General
Record. This guide includes definitions of all headings included on a General Record form, and gives direction as to the type of information that needs to be included. This guide enables both staff and public to understand the necessary information needed to properly complete a record.

Policies for the Port MacDonnell & District Maritime Museum are quite comprehensive. At length it addresses 'Documentation Procedure', providing many examples of the forms used, although all points made address post-donation filing and paperwork. Inadequate mention of the donor is made throughout this procedure, resulting in little instruction regarding collection of information from the donor about items. The 'Interpretation Policy' addresses parts of this information collection, but from differing sources. It also guides how items should be interpreted for the public, as well as conducting research in an effective manner. Addressing all necessary points about rightful ownership or discrepancies, the 'Accessioning Plan' does not go into depth regarding the actual process of accessioning items, simply listing points to remember.

In its entirety, Whyalla Maritime Museum's CMP addresses all necessary aspects and is of a reasonable length. However, hardly anything is said concerning ethics and documentation. Within an explanation of accessioning practices it is mentioned that "An object file is created for each object at the time of registration. It contains hard copies of all paperwork, photographs and correspondence". A description of cataloguing is also included: "Cataloguing is the process whereby all known relevant information about an object is recorded. It includes the physical attributes and
history of objects in a descriptive detail. Classification categories are specified in data fields of the museum’s system”. No further description of documentation practices or ethical problems are mentioned.

Conversely, History SA CMP is most detailed. Divided into four sections and appendices, each area of the policy is explained in depth. Several subsections and points are relevant to this research. This policy follows the code of ethics proposed by Museums Australia Inc. *Code of Ethics for Art, History and Science Museums, 1999* and endorses *Previous Possessions, New Obligations* (Museums Australia Inc, 2000), containing policies on Aboriginal and Torres Strait Islander artefacts. History SA also includes an overall significance assessment process and provides acquisition criteria as well as a separate Acquisition Policy for each of their museums, such as the Migration Museum, National Motor Museum and South Australian Maritime Museum. Within the overall significance assessment process it states that:

"History Trust curators are responsible for assessing the significance of objects in the collections. It is usually a collaborative process, involving donors and former owners, community stakeholders, other museums, curators, historians, other relevant experts and conservators. It can involve research in related primary and secondary sources."

Continuing into the steps taken to assess an items significance, the policy has two relevant points: "identifying the object and making a record of all relevant details including donor and date of acquisition" and "recording the context of the object, including its provenance, locations and use, its relationship with other objects, and its relationship to South Australia’s and Australia’s history". This significance assessment follows into acquisition criteria, of which two points—"the intending owner has legal title to the object" and "the object has a clearly established
provenance'—are of importance and would be defined in the significance assessment. South Australian Maritime Museum (SAMM) Acquisition Policy simply personalises the process to the museum and repeats the Acquisition criteria.

Dissimilar from all other CMPs included in this research, is the inclusion of a 'Cataloguing' section within that of History SA. Within this section the General Record Sheet is explained, noting the inclusion of "research on the object and its historical context" and "a statement of the object's historical significance". It also addresses the long term research applications of having a correctly completed General Record Sheet stating that it should allow: "identification of a particular object; preservation of an object's identity, provenance and history; monitoring of the physical condition of an object; research about an object without unnecessary handling; construction of replicas, facsimiles or reproductions in event of an object's destruction or loss". An object file is also created to contain all information relating to an artefact. As this demonstrates, History SA has compiled a thorough policy, explaining every aspect necessary of collections management. However, it is a purpose of this research to analyse whether each of the policies are correctly followed and carried out, especially in terms of provenance and information recorded.

2.5 Charters, Codes, Conventions and Policies

Governments, and by association museums, are regulated by various documents that apply on a State, National and International level. These charters, codes, conventions and policies can apply to specific artefacts within a museum, like
shipwreck relics; the governance of museums, like ethics principals; the control of artefacts into and out of a country; or any number of other aspects. There are several key organisations involved with these documents, each with their own application.

### 2.5.1 CAN, Collections Council Australia, and Museums Australia Inc.

Collections Australia Network (CAN) has available to all museums and galleries the *National Standards for Australian Museums and Galleries, 2008*. Produced collaboratively by ACT Museums and Galleries; Arts Tasmania; Collections Council of Australia Ltd; History SA; Museum and Art Gallery of the Northern Territory; Museum and Gallery Services Queensland Ltd; Museums & Galleries NSW; Museums Australia (Victoria) and the Western Australian Museum, this document is designed to assist museums and galleries to manage the organisation, involve people, and obtain a significant collection (Collections Australia Network, 2008). This is particularly important for this study due to its focus on obtaining a collection and its inclusion of ethics. However, this document is more of a checklist of points to consider, rather than a policy or convention.

Museums Australia Inc.’s *Code of Ethics for Art, History and Science Museums, 1999* is a guideline, demonstrating correct institutional ethics and professional conduct. Originally developed by the Council of Australian Museums Association¹ in 1985, the *Code of Ethics* was written to address ethics in a variety of general and specialist

---

¹ Amalgamated into Museums Australia Inc in 1993, together with the Art Museums Association of Australia Inc., the Museums Association of Australia Inc., and the Museum Education Association of Australia Inc.
museums. It fully supports all efforts made by UNESCO and ICOM to prevent or reduce illegal trafficking and warns against acquiring unprovenanced items (Museums Australia Inc, 1999:Article 3.2, 3.4).

Significance 2.0: a guide to assessing the significance of collections is the second revised edition released by Collections Council Australia (Russel and Winkworth, 2009). Building on the original release, published by the Heritage Collections Council—part of the Department of Communications, Information Technology and the Arts—, the text addresses all areas of significance. Included are examples to help museums in writing significance assessments, understanding what significance is, process and criteria, the relationship between provenance and significance and the importance of context.

2.5.2 ICOM

“The International Council of Museums (ICOM) is the only international organisation representing museums and museum professionals” (International Council of Museums, 2010). Originally adopted in 1986, ICOM’s Code of Ethics for Museums is now arguably the standard for museum ethics in the world. This guide to museum ethics is comprehensive, creating thorough definitions and clear instructions. Of particular interest for this research is Article 2.4 which states that:

“Museums should not acquire objects where there is reasonable cause to believe their recovery involved unauthorised or unscientific fieldwork, or intentional destruction or damage of monuments, archaeological or geological sites, or of species and natural habitats. In the same way, acquisition should not occur if there has been a failure to disclose the finds to the owner or occupier of the land, or to the proper legal or governmental authorities.” (International Council of Museums, 2004:Article 2.4)
These sentences govern museum ethics worldwide regarding unprovenanced objects, and as such one of the foci of this research.

### 2.5.3 ICOMOS

The International Council on Monuments and Sites (ICOMOS) was created out of the Second Congress of Architects and Specialists of Historic Buildings in 1964 (International Council on Monuments and Sites, 2005). There is one charter that applies to shipwreck material and to underwater cultural heritage in general: the *Charter on the Protection and Management of Underwater Cultural Heritage, 1996*. This charter was intended to encourage the protection of underwater cultural heritage sites and forms a guide of how archaeological fieldwork should be conducted on such sites. It also states that *in situ* is the preferred method of conservation (International Council on Monuments and Sites, 1996:Article 1). Made to compliment the ICOMOS *Charter for the Protection and Management of Archaeological Heritage, 1990*, the 1996 charter became the predecessor to the UNESCO *Convention on the Protection of the Underwater Cultural Heritage, 2001* (International Council on Monuments and Sites, 1996:Introduction).

### 2.5.4 UNESCO

UNESCO’s (United Nations Educational, Scientific, and Cultural Organisation) *Convention on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property, 1970* was one of the first steps to protecting cultural heritage. However, this convention has been supplemented with another convention relating specifically to underwater cultural heritage. The
UNESCO Convention on the Protection of the Underwater Cultural Heritage, 2001 focuses solely on those items of significance in an underwater site. However, the Australian Government has yet to ratify this newer convention, but is now, as aforementioned, reviewing the Historic Shipwrecks Act 1976.

2.6 Previous Research

While no published research concerning this topic exists, comparisons can be made to similar works, relating to individual components of this study. Those components consist of museum, shipwreck, and maritime archaeological artefact studies.

2.6.1 International Research

There is a wide variety of articles discussing salvers and treasure hunters, and their impact on maritime archaeological sites (des Portes, 1996; Flecker, 2002; Hosty, 1995; Jarvis, 1999; Johnston, 1993, 1992). Only a few of these, however, demonstrate how commercial salvage and individual collectors impact museums. Paul Johnston (1992) goes back to 1987 to review the Council of American Maritime Museums (CAMM) and their efforts to stop the display of unscientifically recovered items. This initial act was then followed by the creation of the International Congress of Maritime Museums’ (ICMM) Subcommittee on Maritime Archaeology in 1987, whose aim was to “complete a survey on existing policies as regards museum acquisitions of objects from underwater archaeological sites and set recommendations for ICMM’s position with regards to the acquisition of these objects” (Johnston, 1992:119). In America, and internationally, this was an early attempt at limiting the amount of commercially salvaged artefacts on display in
museums. Johnston (1993) then published the results of the survey conducted by the ICMM regarding museum acquisition policies. This survey returned some interesting results concerning museum policies and knowledge of ICOM, ICOMOS and UNESCO. The statistics developed demonstrate how a variety of change has occurred and how much more there is to be achieved. Kieran Hosty’s (1995) article takes a different approach to the discussion surrounding commercially salvaged goods displayed. He discusses the problems surrounding the Titanic travelling exhibition and why the National Maritime Museum (Greenwich, London) accepted the exhibition despite the conflict in opinions. Revolving around ethics, Hosty also scrutinises the ICMM and CAMM’s efforts to establish ethical guidelines, as well as ICOMOS and UNESCO’s guidelines. However, it is these specific ethics guidelines that led the National Maritime Museum to its decisions. While slightly outdated, these articles are important because they demonstrate that a substantial issue is present—one that still continues to this day—and the actions taken by many to attempt a resolve.

2.6.2 Research on South Australia’s Shipwrecks

Research conducted in South Australia on the state’s many shipwrecks are numerous. Publications are mainly divided into geographic areas or commonwealth and state waters (Arnott, 1996; Chapman, 1972; Clark, 1990; Coroneos, 1997; Coroneos and McKinnon, 1997; Department of Environment and Planning: State Heritage Branch, 1991, 1987; Loney, 1993, 1973, 1971; McKinnon, 1993; Moran, 2000; Perkins, 1988; Richards, 2007; South Australian Department of Environment and Land Management, 1994; Temme, 1975). Due to their large number, it is
impossible to describe or discuss each individually. There certainly is sufficient background knowledge on the majority of the shipwrecks encountered within this research. However, it should be noted that only few publications specifically mention artefacts in museums or the archaeological excavation of South Australian shipwrecks. Most publications are historical accounts of the shipwrecking events supplemented with information obtained from dives on relocated sites. Paul Clark (1990) recommends in his report on south-east South Australian shipwrecks, that “… a survey be carried out to document the artefacts which have been recovered from shipwreck sites in the south east”. Sarah Kenderdine (1991) commenced and completed this work that consists of 206 artefact records, which include the shipwreck’s name, description of item, and storage place. She does not mention how specific items were recovered from—both unidentified and indentified—shipwrecks. Other studies of shipwreck artefacts focus on particular wrecks, excavations or collections, unlike the thematic aspect of this research.

2.6.3 Research Influences

Similar to this study is Peta Knott’s 2006 Masters Thesis, “How are Shipwrecks Represented in Museums? The Investigation of Museum Workers, Exhibitions and Visitors”. Knott investigated, with the use of surveys, how museum workers and visitors view shipwrecks and shipwreck exhibitions and quantifies the results to demonstrate areas of improvement. Aspects of her research overlap into this study, through areas such as museums with shipwreck artefacts, the method of locating them, and the relevance of shipwrecks and museums. In addition, the data collected by Knott provides an interesting look into public and staff views into
current legislation and opinions of artefacts in general. Knott’s study provides significant guidance for this research (See Chapter 3).

Two major sources of information used within this research are the SA Department of Environment and Natural Resources’ Relic Report and 2009 Regional Museums Audit. These lists comprise shipwreck artefact information sourced from collections within South Australia, including reported private collections, storage centres, and museums. While these databases are incomplete and need constant updating, they provide a ‘fallback’ where museum information is lacking.

2.7 Summary

Museums in Adelaide have been collecting and displaying shipwreck artefacts for over 150 years. Most of these collections have increased in size since the introduction of readily available SCUBA equipment in the 1950s. In the following 20 years, however, Australia’s governments began to look at protecting these aspects of cultural heritage. The Commonwealth Historic Shipwrecks Act 1976, accepted by all states, and individual state legislation introduced protection to shipwrecks. Outside influences, primarily from UNESCO, ICOMOS, and ICOM, began to push for further protection of this heritage worldwide in attempt to dissuade commercial salvagers and collectors. This has led to strict ethics and collection management policies in museums, to reduce the amount of items from questionable backgrounds being accessioned into collections. This research demonstrates what is actually on display for the public, whether items come from questionable ethical or professional contexts and whether sufficient information is available for individual
artefacts.
3 METHODOLOGY

This chapter details the method of data collection and processing used within this research. Relevant information was obtained in four major steps:

1. The establishment of a museum database and compilation of collection management policies;
2. Field trips to readily accessible museums in order to obtain photographs of artefacts and museum registers;
3. Recording of artefact data from every museum register into a database;
4. and Processing of data using several different methods with the aim of answering key questions.

Each of these steps is described in detail, including difficulties encountered and solutions introduced in consequence.

3.1 Stage One—Museums Database

Shipwreck artefacts and their museum register entries are the key focus of this research. Therefore, it was paramount to identify museums within South Australia that displayed shipwreck artefacts. Knott's (2006) thesis, with its focus on the representation of shipwreck artefacts in museums, was an obvious starting point. Knott's study presented nineteen relevant museums that became the first entries into a museum database. Primarily using the internet, investigation of these museums was undertaken to verify the display of shipwreck relics and current contact details. Three websites, thought to be predominantly correct as a result of their controlling establishments, commonly returned positive results and provided much of the preliminary information. These included: Collections Australia Network (Collections Australia Network, n.d.), National Trust of South Australia (National Trust of South Australia, n.d.-b) and the South Australia Tourism site (South
Australian Tourism Commission, n.d.). Preliminary data, i.e. museum names, addresses, phone numbers, email addresses, and opening times, was entered into an Excel document and divided into major peninsulas/coastlines for easy navigation.

Although Knott's (2006) thesis featured a large sample of museums from South Australia, additional museums were located through further research. Three museums were discovered and added from the National Trust of South Australia website, (National Trust of South Australia, n.d.-b). Contact was made with the Department of Environment and Natural Resources (DENR) who provided a copy of their Relic Report, which is a comprehensive spreadsheet containing all recorded shipwreck artefacts in South Australia, and the 2009 Regional Museums Audit that is intended to update the aforementioned. These spreadsheets provided an additional museum, as well as confirming many museums listed within the working database. Of note were the other types of establishments included in the sheets that stored relics—pubs, sailing clubs, and warehouses. Because the establishments are not museums and are, therefore, unlikely to have Collection Management Policies or artefact registers, they were outside the scope of this research and not included.

Twenty-three museums (Figure 1) were listed in the database compiled from both Knott's (2006) Thesis and subsequent research. This database was edited and updated over the course of the study to ensure contact details were accurate. Phone numbers in the database were often changed as several museums had
multiple contact numbers. On several occasions these numbers contacted former staff members who politely provided correct details when they could. Home phones or personal mobile numbers were provided for the most part, creating an unprofessional appearance for the museum. Contact via email was also problematic due to their personal nature and the lack of responses received. Edithburgh Museum proved to be particularly difficulty as no contact could be made with anyone linked to the museum. Aside from Edithburgh Museum, all listed
establishments were successfully contacted by phone or email, the project was explained and other contact details verified.

It was noted that the majority of shortlisted museums were part of the National Trust. Therefore, in order to collect Collection Management Policies, the NTSA was contacted directly and they provided a copy of their CMP via email. Seven additional CMPs were also collected from the remaining museums. Contact with SAMM provided the entire History SA CMP and all other museums provided copies of their policies. These policies were highlighted to indicate areas of interest, a critique and summary of which can be seen in Chapter 2.

3.2 Stage Two—Field Trips

Museum registers come in a variety of formats, paper and electronic, with different recording layouts. To record them in a systematic manner, the author visited the majority of museums in person, with field trips taken to 18 of the 23 museums. Chosen in terms of their location, proximity to other museums, opening times and travel time, these field trips were organised with the assistance of the museums involved (Figure 2; Table 1). Supporting documentation was submitted with Flinders University detailing intent and locations and was kept on hand at all times.

Field Trips focused on photographing any possible shipwreck artefacts currently on display and collecting appropriate copies of museum registers. However, due to time constraints, registers were not collected from all museums in person and the remaining registers were obtained later after phone enquiries. Subsequent trips
were also taken to several museums in order to meet with curators and to access records. Both hard copy and electronic registers were obtained, all of which contained a variety of differing criteria and filing systems. At this time, many registers were undergoing computerisation/digitisation, some recently completed. It was for this reason that Whyalla Maritime Museum decided to provide their registers, as a high level of difficulty would have been encountered for both parties. Photographs were taken of potential shipwreck artefacts, together with their associated labels. Undertaken as a minor task within the field trips, photos allowed for a visual memory to be kept of all museums and artefacts, in addition to enabling the creation of an object list and conducting individual shipwreck research prior to obtaining copies of registers. Images were taken using a Sony DSC-W570 camera with a 16mp resolution by the author, but had several restrictions due to display types. Glass display cases posed several problems such as inhibiting the use of a scale and affecting camera focus and flash reflections. Lighting was also a problem in many buildings. Images taken are therefore only a representation of the item and are not considered to be accurate depictions. Some museums also provided their own register photographs of differing quality, and acknowledgements have been made where this occurs. It was important to remember during these visits that only items on display were to be included in this study, despite staff offers to access storage areas.

Prior permission was given for both photography and register access from all museums via phone or email. This allowed for quick, focused visits, maximising the allotted time within each museum. After visiting each museum, photographs were
loaded into appropriate digital folders and labelled according to date, item, museum artefact number and author. Photographic and electronic copies of all registers were similarly sorted and labelled. During visits, museum staff members were polite, helpful, and genuinely interested in the research undertaken, and many requests regarding the finished study were received. The remaining museums not personally visited were equally helpful and interested, politely providing requested information despite the lengthy process entailed. Funding was received from the Flinders University Humanities Department as part of Research Student Support in addition to receiving the 2011 Australasian Institute for Maritime Archaeology Scholarship. A total of $800 was received toward travel expenses. It should be noted that ‘On loan’ items were included within this research. While loaned items are inevitably returned to their owners, similar types of information are collected by museums, mainly to assist with display. In many cases artefacts were on loan from other museums or collection holders.

3.3 Stage Three—Artefact Database

After collecting copies of all registers and images of items where possible, relic information was entered individually into an artefact database created in Microsoft Access. In some cases registers were not available due to contact issues and poor organisation on behalf of museums. In these cases the DENR Relic Report and the 2009 Audit were used as substitutes. Mentioned afore, both documents contain artefact information provided by museums, notifying the government of items within their collections. However, the full information recorded within the DENR documents is provided at the individual museums discretion.
Table 1: Museum Field Trips undertaken to 18 of the 23 museums. Each trip location is provided, followed by the specific museums visited. Colours correspond to Figure 2.

<table>
<thead>
<tr>
<th>Location</th>
<th>Museums Visited</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fleurieu Peninsula</td>
<td>14. Willunga Courthouse Museum</td>
</tr>
<tr>
<td></td>
<td>15. Port Elliot Railway and Seaport Museum</td>
</tr>
<tr>
<td></td>
<td>16. Encounter Coast Discovery Centre</td>
</tr>
<tr>
<td></td>
<td>17. Goolwa Museum</td>
</tr>
<tr>
<td>Limestone Coast</td>
<td>19. Kingston Museum</td>
</tr>
<tr>
<td></td>
<td>20. Robe Old Customs House Museum</td>
</tr>
<tr>
<td>Yorke Peninsula</td>
<td>22. Millicent Museum</td>
</tr>
<tr>
<td></td>
<td>6. Wallaroo Heritage and Nautical Museum</td>
</tr>
<tr>
<td></td>
<td>7. Port Victoria Maritime Museum</td>
</tr>
<tr>
<td></td>
<td>9. Ardrossan Museum</td>
</tr>
<tr>
<td>Adelaide</td>
<td>12. South Australian Maritime Museum</td>
</tr>
<tr>
<td></td>
<td>13. Bay Discovery Centre</td>
</tr>
<tr>
<td>Kangaroo Island</td>
<td>10. Hope Cottage Museum</td>
</tr>
<tr>
<td></td>
<td>11. Penneshaw Maritime and Folk Museum</td>
</tr>
<tr>
<td>Eyre Peninsula</td>
<td>3. CL Alexander (Tumby Bay) Museum</td>
</tr>
<tr>
<td></td>
<td>4. Whyalla Maritime Museum</td>
</tr>
<tr>
<td></td>
<td>5. Port Pirie Museum</td>
</tr>
<tr>
<td></td>
<td>8. Edithburg Museum</td>
</tr>
<tr>
<td></td>
<td>18. Swan Reach Museum</td>
</tr>
<tr>
<td></td>
<td>23. Port MacDonnell Maritime Museum</td>
</tr>
</tbody>
</table>

Figure 2: Museums containing shipwreck artefacts in South Australia. Field trips were taken to museums over several months. See Table 1 for specific museums visited.
3.3.1 Creating a Database Using Microsoft Access

Microsoft Access was used to create an artefact database, selected to display records in a simple and comparative manner. Due to availability and limited training needed, the program was used to successfully create several different forms, including tables and reports. Initial entries were created gradually, allowing for several settings to be altered to further suit the purposes of the database. Museum register headings influenced the categories within the database, but were predominately based on Brian Abell-Seddon’s (1989) REFORM Reference Framework. Within this framework, Abell-Seddon identifies four tiers of information that were to be included within his REFORM software for museums. These tiers including Historical, Descriptive, Cumulative, and Managerial, each have a set of statements that could be included for any type of object (Abell-Seddon, 1989:64). Focusing on the Historical tier, many of the categories Abell-Seddon suggests have been adapted and included within the database headings including Acquisition, Ownership, Association, and Origin (See Figure 3).

During database configuration, information detailed on labels was included to observe label habits and styles. Additional information provided on the label but not included in the register was also incorporated. In addition to label information, the options 'Relic Report' and 'DENR 2009 Audit' were included as checkboxes, indicating whether the artefact was present on the DENR South Australian Relic Report and the 2009 Regional Museums Audit.

A numbering system was applied to represent museums and artefacts within the
databases. This took the form of a number assigned to each museum and an artefact number separated by a decimal point, for example 12.35 indicates the 12th museum (South Australian Maritime Museum) and 35th artefact (a glass prism). Using this system, artefacts are immediately identifiable concerning originating museum. Keywords can also be entered to search the database, allowing navigation through all responses by the user. This allows the database to be user-friendly, especially should a group of artefacts or singular items need to be found, such as pulley blocks, portholes, or, more specifically, the Star of Greece figurehead. Photos made during the field trips and supplied by individual museums were linked to the database providing a visual reference for each record.

Microsoft Access presented several problems partway through the data entry process. The largest problem encountered was a file-size limit to 2GB. The inclusion of images in the database ensured this limit was reached quickly, resulting in file corruption and the inability to continue adding entries. Initially all museum data was listed in a single database, but to rectify the problem the data for each museum was allocated to its own database (See Appendix 2). This eliminated the problem, although it removed the ability to search across museums for similar items. In some cases, a database consisted of less than 5 items, also increasing the complexity of the file system. However, other alternatives reduced the future applications of the database. Inclusion of images at a high resolution within individual databases supported these future applications—namely the ability to have a quality image for reference and to keep databases restricted to one file each without links to other documents that may be lost during transfers or over the course of time. To regain
Figure 3: Screenshot of Database, in 'Form' view.
some cross-museum accessibility, upon completion each database was exported into an Excel file and compiled into a master list, containing four key headings of Museum #, Artefact #, Wreck ID and Description. This file acts as an index to the databases allowing for a South Australia wide search (Appendix 3).

### 3.3.2 Determining a Shipwreck Artefact

The definition of a shipwreck artefact was an important part of this research, without which analysis could not take place. However, this aspect was not realised until museum staff asked the question “what is a shipwreck artefact?” For the purpose of this research it is considered the result of maritime archaeological excavation of a shipwreck site, or has been removed from a wreck site with archaeological potential. To ensure this definition was applied across all potential artefacts, a system was devised. As each artefact was added into the database, ship names were compared against the Australian National Shipwreck Database to authenticate wrecking events. One drawback of using the shipwreck database is the inclusion of abandoned wrecks. This, however, was rectified with further research into the ship’s history, utilising simple internet searches. Clarifying the shipwrecking event through the Australian National Shipwreck Database enabled the exclusion of many items from ships abandoned, dismantled or, in one case, still in use. Some promising artefacts had come from shipwrecks before their wrecking, removed from the vessel by families travelling aboard, and were considered historical rather than archaeological. One example of which was a snuff box from the HMS *Buffalo*, held by the South Australian Maritime Museum. This snuff box came from the ship but was removed by a family travelling onboard and passed down through the
family to be later donated to the museum. As the article was not a ‘shipwreck artefact’ but an historic relic, it was not included in this study, although this could only be deduced from its label and the museum’s register.

Not all potential artefacts were from shipwrecks in Australian waters. Investigation into international shipwrecks was also undertaken when necessary to determine possible wrecking events. One example can also be seen of a ship suffering a wrecking event, later to be refloated and lost again several years later. In this case the artefact in question was recovered from the first wreck site, and, as the ship suffered a wrecking event despite no permanent loss, the item was considered archaeological and included within the parameters of this research.

### 3.3.3 Museum Records

When approaching museums about their records, it became evident that the mix of paper and electronic records would lengthen the process of adding artefacts to the database. At the time of writing, several museums were converting their records into electronic formats, either as a simple Microsoft Excel document or with software programs such as Collections MOSAiC. Comparing paper and electronic records became a common process to ensure that all the data was collected. This lengthened the time taken to enter items into the database, and resulted in somewhat complicated records. However, the entries present a more thorough recording of each artefact.

Some museum curators undertook extra research on each artefact when notified of
this study, mostly occurring where records were either missing entirely or limited due to record age. This information was included within the ‘Notes’ section of the records, clearly marked with the name of the curator/manager who conducted the research. Many museums are currently in the process of assessing early acquisition records and are, thus, adding extra information, although this was not included for the purpose of this thesis. More specific information related to these databases can be found in Appendix 1, as many have extra information or notes to help understand their artefact, museum or recording systems.

3.4 Stage Four—Processing Data

Three aspects of data processing needed to occur to answer the key questions of this research. Firstly, artefacts were categorised as either ‘Donated’ or ‘Recovered Archaeologically’. Further distinction was necessary due to the number of entries, including 'Donated—Salvaged', 'Donated—Diving Club', 'On loan from Private Collection', and 'Not Recorded'. This data was entered into an Excel sheet from which the processed data can be further adapted into illustrative statistics.

3.4.1 Accepted Archaeological Standards

A comparison was needed between the data, CMP’s and accepted archaeological standards to address the second question of this research. Accepted archaeological standards vary depending on country, ethics and education. For this research, standards have been taken from two texts, *Underwater Archaeology: The NAS Guide to Principals and Practice* (Bowens, 2009) and *The Archaeologist’s Field Handbook* (Burke and Smith, 2004).
Archaeological standards of excavation begin with the discovery of a site. Once the site is found, basic location and descriptive information should be noted (Burke and Smith, 2004:81). Burke and Smith (2004:83) provide a list of what not to do:

- "Don't interfere with a site in any way.
- Don't collect 'souvenirs', even to verify to state authorities that you have found a site.
- Don't leave rubbish behind.
- Don't make details of the site public without obtaining the proper permissions first."

These apply to all archaeological sites, terrestrial and underwater. The majority of archaeology standards and ethics occur when recording and excavating a site. It is the aim of archaeological recording to note 'what is there' as accurately and completely as possible, without allowing interpretation to interfere with the method of recording (Bowens, 2009:53). After recording, archaeologists—present or future—should be able to reconstruct the site from the information documented (Bowens, 2009:53). Excavation is a destructive process, making this ideal particularly important (Bowens, 2009:53).

Several details should be included when in situ (in their current situation, without moving the item) artefacts are recorded, such as a "unique identification number (artefact number), a description of the object, measurable dimensions and a sketch plan with details of location, orientation, associated materials/finds, appropriate survey measurements and any important features visible" (Bowens, 2009:56). More in-depth recording should be conducted if the item is recovered and conserved. The careful recording of sites and artefacts allow archaeologists to understand and
An excellent example of this standard can be seen in the survey, excavation and partial recovery of the Xantho (1872). To ensure proper information recording, forms were specifically designed for the project, to be used in conjunction with particular surveying techniques and methods (Prall, 2009:59). Once items were recovered with artefact tags attached, relics were further recorded, listed in a artefact book and plotted on a 1: 10 site plan (Prall, 2009:59). With the recovery of the Xantho engine, an additional record book began, as many artefacts appeared to be concreted to the area surrounding the engine (Prall, 2009:60). This careful recording allowed archaeologists to reconstruct the engine into working order after conservation (Prall, 2009:61). This archaeological standard of excavation and recording was applied to the artefact database for this study, evaluating each record in terms of the total amount of information available on each item.

3.4.2 Classification System

After evaluating each artefact record in the database a classification system was implemented, developed to indicate the level of information available. Using a simple three grade category for both CMP requirements and archaeological standards, 1 to 3 and A to C respectively, each artefact record was given a rating (See Table 2). Utilising Excel, six of the original database headings were included, with the addition of 'Artefact CMP Rating' and 'Artefact Archaeological Rating'. When classifying the museums overall, a whole number average was taken to determine the rating (the exact average was also included). These ratings indicate the overall level of the record as well as the amount of in-depth information
concerning history and provenance of the item itself.

<table>
<thead>
<tr>
<th>CMP</th>
<th>Overall Record</th>
<th>Archaeological Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Does not fulfil requirements. Contains a low level of information.</td>
<td>C</td>
</tr>
<tr>
<td>2</td>
<td>Partially fulfils requirements. Contains a medium level of information.</td>
<td>B</td>
</tr>
<tr>
<td>1</td>
<td>Fulfils requirements. Contains a high level of information.</td>
<td>A</td>
</tr>
</tbody>
</table>

Table 2: CMP and archaeological method classification system details.

### 3.4.3 Creating Statistics

Entries were compared against each other to demonstrate areas in which no information has been recorded. Listed in Excel, this table can be manipulated to show which database records contain specific information, as well as showing Yes/No totals for each heading. While the majority of the entries were supplemented with information from the Relic Report and 2009 Audit, this information was not taken into account as it is only held by DENR, not within the museum registers. Comparison was also made between museum registers by calculating the average of the individual fields. An indication of which museums need to address problems within their record keeping is highlighted. These results also show an average across South Australia for each category. In total, five Excel documents were created for manipulation into usable statistics concerning the state and content of South Australia's museum registers.

### 3.5 Summary

A list of museums was compiled in order to collect the data necessary for this
research. These museums were approached regarding their shipwreck collections and records. Data was collected in a variety of formats conducted over several months, through field trips, phone calls and emails. All data was then entered into a Microsoft Access Database with associated photos of each artefact. These entries were checked through a series of steps to determine their incorporation within this research. Using the database, further analysis was conducted on the records and each artefact was assigned a category. Records were also compared with each other in order to address the key questions of this research.
4 RESULTS

This chapter presents the data extracted and compiled from museum registers. Data led to categorisation of artefact records and allowed for the calculation of ratings. These ratings demonstrate the overall content of records in museum registers, the archaeological provenance of artefacts, and the fulfilment of CMPs. Statistics detail the level of completeness within museum registers, and where areas of improvement can be found. Furthermore, this chapter provides a profile for artefacts provenance, i.e. where artefacts are donated from or whether they are archaeologically excavated relics.

4.1 A Question of Detail: Artefact Ratings

4.1.1 Archaeological Rating

From 23 museums across South Australia, 645 artefacts have been included within this research. Of these, 52 artefacts from four museums (M05, M08, M15 and M16, Table 3) were included without museum registry data. Instead, information pertaining to these artefacts was supplemented with data from the DENR Relic Report and 2009 Regional Museums Audit. The author, for example, collected data from artefacts in the collection of M10 from all three sources because it was difficult to link objects to their respective records in the registry. The 52 artefacts are, subsequently, included in the dataset without alterations to the criteria for their assessment. Shipwreck histories, i.e. the events leading up to their demise, and factual information are excluded from the archaeological rating process. Only the history of the artefact at the time of recovery and subsequent events is
captured within this rating. Historical information is nevertheless important and is included within the CMP Rating.

<table>
<thead>
<tr>
<th>Museum Number</th>
<th>Museum Name</th>
<th># Artefact Records Created</th>
</tr>
</thead>
<tbody>
<tr>
<td>M01</td>
<td>Streaky Bay National Trust Museum</td>
<td>3</td>
</tr>
<tr>
<td>M02</td>
<td>Axel Stenross Maritime Museum</td>
<td>15</td>
</tr>
<tr>
<td>M03</td>
<td>Tumby Bay National Trust Museum (also known as CL Alexander Museum)</td>
<td>10</td>
</tr>
<tr>
<td>M04</td>
<td>Whyalla Maritime Museum</td>
<td>10</td>
</tr>
<tr>
<td>M05</td>
<td>Port Pirie National Trust Museum</td>
<td>2</td>
</tr>
<tr>
<td>M06</td>
<td>Wallaroo Heritage and Nautical Museum</td>
<td>57</td>
</tr>
<tr>
<td>M07</td>
<td>Port Victoria Maritime Museum (National Trust)</td>
<td>69</td>
</tr>
<tr>
<td>M08</td>
<td>Edithburg Museum</td>
<td>22</td>
</tr>
<tr>
<td>M09</td>
<td>Ardrossan and District Historical Museum (National Trust)</td>
<td>37</td>
</tr>
<tr>
<td>M10</td>
<td>Hope Cottage (Kingscote National Trust Museum)</td>
<td>49</td>
</tr>
<tr>
<td>M11</td>
<td>Penneshaw Maritime and Folk Museum (National Trust)</td>
<td>28</td>
</tr>
<tr>
<td>M12</td>
<td>South Australian Maritime Museum</td>
<td>97</td>
</tr>
<tr>
<td>M13</td>
<td>Holdfast Discovery Centre</td>
<td>3</td>
</tr>
<tr>
<td>M14</td>
<td>Willunga Courthouse Museum (National Trust)</td>
<td>13</td>
</tr>
<tr>
<td>M15</td>
<td>Encounter Coast Discovery Centre (Victor Harbour National Trust Museum)</td>
<td>19</td>
</tr>
<tr>
<td>M16</td>
<td>Port Elliot Historic Railway and Seaport Centre (National Trust)</td>
<td>9</td>
</tr>
<tr>
<td>M17</td>
<td>Goolwa National Trust Museum</td>
<td>9</td>
</tr>
<tr>
<td>M18</td>
<td>Swan Reach Museum</td>
<td>1</td>
</tr>
<tr>
<td>M19</td>
<td>Kingston National Trust Museum</td>
<td>8</td>
</tr>
<tr>
<td>M20</td>
<td>Robe Old Customs House National Trust Museum</td>
<td>10</td>
</tr>
<tr>
<td>M21</td>
<td>Beachport Old Wool and Grain Store National Trust Museum</td>
<td>27</td>
</tr>
<tr>
<td>M22</td>
<td>Millicent National Trust ‘Living History’ Museum</td>
<td>51</td>
</tr>
<tr>
<td>M23</td>
<td>Port MacDonnell and District Maritime Museum</td>
<td>97</td>
</tr>
</tbody>
</table>

Table 3: Museum Guide—This table gives the museum number assigned for the purpose of this research, the name of the museum and the number of artefact records investigated.

The archaeological rating of each artefact included an assessment of the number of words within a record referring to its provenance and subsequent history. Such word count provides an indication of the amount of text recorded for an artefact's history but does not consider the content/quality of those words. Artefact records rated with an 'A' include enough information to create an account of where the relic came from and its history since. Ratings of 'B' and 'C' have a medium amount and a
 Unexpectedly, a rather small amount of artefacts had sufficient information to receive an 'A' rating—only 1% (10 records) (See Figure 4). This 1% included enough information for the development of an artefact label as opposed to undertaking extra research (Serrell, 1996:125). Records that were rated 'B'—37 artefacts or 6% (See Figure 4)—represent the inclusion of some information about artefacts, but could still potentially include more. These artefacts typically record a vague mention of the items provenance and history without much depth, for example: "Recovered by .... and ...., December 1960." or "Found at Sleaford Bay 2007. From wreck of Mary Ellis". The largest number of records, 598 records (93%), were rated 'C', many having no mention of provenance or donor (Figure 4). For some, only the basics can be extrapolated from their registry entry, for example the name of a donor or the indication "from wreck of ...".

One similarity becomes apparent when further analysing the 10 records rated 'A'. Of the 10 records, only four museums are listed, M04, M12, M14 and M23, three of which are maritime museums. Both the SAMM (M12) and Port MacDonnell Maritime Museum (M23) each have four records within this rating level (Table 4), perhaps indicating better recording by maritime museums in general. On Table 4, two highlighted records show that 12.25 and 12.88, both from M12, are listed on the Archaeological and the CMP Rating 'A/'1" lists (see below for further results of CMP Ratings) and are the only occurrences of inclusion on both tables.
Artefact Record Archaeological Rating Analysis

Figure 4: The results from the artefact record archaeological rating analysis. 93% (598) of records were rated C; 6% (37) of records were rated B; and 1% (10) records were rated A.

Artefacts Which Fulfil Archaeological Rating A

<table>
<thead>
<tr>
<th>Museum</th>
<th>Artefact</th>
</tr>
</thead>
<tbody>
<tr>
<td>M04</td>
<td>04.01</td>
</tr>
<tr>
<td>M12</td>
<td>12.08</td>
</tr>
<tr>
<td>M12</td>
<td>12.25</td>
</tr>
<tr>
<td>M12</td>
<td>12.38</td>
</tr>
<tr>
<td>M12</td>
<td>12.88</td>
</tr>
<tr>
<td>M14</td>
<td>14.03</td>
</tr>
<tr>
<td>M23</td>
<td>23.66</td>
</tr>
<tr>
<td>M23</td>
<td>23.67</td>
</tr>
<tr>
<td>M23</td>
<td>23.83</td>
</tr>
<tr>
<td>M23</td>
<td>23.94</td>
</tr>
</tbody>
</table>

Table 4: Table showing the 10 artefact records and their corresponding museums that were rated ‘A’. Those highlighted in yellow indicate that the record is listed in both Archaeological and CMP Rating ‘A/1’ lists.
4.1.2 CMP Rating

Results from the Collection Management Policy Rating analysis are quite similar to the Archaeological Rating analysis. While CMP's vary between different museums, the core principals are the same throughout, translating into one simple question or request—is everything possible recorded, including the history of an item? To use this in combination with a rating system, the main approach was to critically analyse whether any additional information could possibly exist for the item. This included searching for several key points of information, such as Provenance, Shipwreck, Acquisition/Accession, and specific artefact information. Unlike the Archaeological Rating process, analysing the data with this method provides a rating utilising all recorded information.

Remarkably similar to the Archaeological Rating analysis, only 1% of artefact records fall into a level '1' rating (Figure 5). Data within these 10 records consisted of a large amount of information overall, covering each of the aforementioned key points. Only two of the artefact records achieved both the Archaeological Rating 'A' and CMP Rating '1' (Table 5). Level '2' included 75 (12%) records, which generally address two or three key points yet contained little detailed information. Correspondingly, 87% (560) of records contained two or less key points with little detail, or conversely lacks information entirely, bar the name of the artefact. These results were originally expected to fulfil their CMP requirements, whereas the opposite was found, although the CMP's themselves are open to individual interpretation.
Analysing the 10 artefact records rated level '1' produces some similarities. Aside from the two reoccurring records, the majority of artefacts are from M12 although the Swan Reach Museum (M18) and Millicent National Trust Museum (M22) are present as well. This indicates that for these 8 records M12 has recorded every possible aspect of the relics, with two of those including a detailed provenance. One
could argue that this indicates that M12 has better records than all other SA museums. However, this topic is addressed in the Museum Rating analyses following.

### 4.2 A Question of Detail: Museum Ratings

Rating museums across South Australia created a reflection on the state of registers for both maritime and district museums. These whole number ratings were extracted directly from the individual record analysis and averaged for each museum. When calculating averages from the Archaeological Ratings, the letter system was given the value of its equivalent number—'A' became 1, 'B' became 2 and 'C' became 3. This resulted in an average that could be converted back into a letter format.

Unanticipated results occurred within the Museum Archaeological Rating analysis. It was expected that a few museums would attain 'B' or 'A' ratings with the majority receiving a 'C'. However, this was not the case, and all museums averaged a 'C' rating (See Table 6). This reinforces the necessary analysis of individual records as it further shows that, while on average museums contain little archaeological and provenance information, there are some standout records, as previously outlined. Nevertheless, these results do indicate the need for more provenance information to be recorded within museum registers.
Museum Ratings for both CMP and Archaeological Analyses

<table>
<thead>
<tr>
<th>Museum No</th>
<th>Museum CMP Rating</th>
<th>Average Artefact Record CMP Rating</th>
<th>Museum Archaeological Rating (taken from average artefact rating)</th>
</tr>
</thead>
<tbody>
<tr>
<td>M01</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M02</td>
<td>3</td>
<td>2.7</td>
<td>C</td>
</tr>
<tr>
<td>M03</td>
<td>3</td>
<td>2.7</td>
<td>C</td>
</tr>
<tr>
<td>M04</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M05</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M06</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M07</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M08</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M09</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M10</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M11</td>
<td>3</td>
<td>2.9</td>
<td>C</td>
</tr>
<tr>
<td>M12</td>
<td>3</td>
<td>2.6</td>
<td>C</td>
</tr>
<tr>
<td>M13</td>
<td>3</td>
<td>2.6</td>
<td>C</td>
</tr>
<tr>
<td>M14</td>
<td>3</td>
<td>2.7</td>
<td>C</td>
</tr>
<tr>
<td>M15</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M16</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M17</td>
<td>3</td>
<td>2.7</td>
<td>C</td>
</tr>
<tr>
<td>M18</td>
<td>1</td>
<td>1</td>
<td>C</td>
</tr>
<tr>
<td>M19</td>
<td>3</td>
<td>2.8</td>
<td>C</td>
</tr>
<tr>
<td>M20</td>
<td>3</td>
<td>2.9</td>
<td>C</td>
</tr>
<tr>
<td>M21</td>
<td>3</td>
<td>3</td>
<td>C</td>
</tr>
<tr>
<td>M22</td>
<td>2</td>
<td>2.3</td>
<td>C</td>
</tr>
<tr>
<td>M23</td>
<td>3</td>
<td>2.9</td>
<td>C</td>
</tr>
</tbody>
</table>

Table 6: Museum ratings compiling the average Archaeological and CMP Rating. Highlighted museums and CMP ratings show the level 1 and 2 museums as well as the next two closest museums, determined by average.

Likewise, the results from the Museum CMP Rating do not greatly vary from the Archaeological Rating. Twenty-one of the museums received a '3' rating, two of which have been highlighted in Table 6 as they received a 2.6 average and consequently scored the closest to the next whole number with rounding. One museum was awarded a '2' rating, M22, illustrating that a relatively good amount of information had been included within its register. Of specific note, M18, awarded a '1' rating, only contains one artefact included in this research, affecting the result.
4.3 Missing Information: Artefact Records

The four previous analyses examined the information content from a quality and quantity aspect. However, the following investigations address and highlight areas lacking information entirely. Hidden within the lower ratings of the previous analyses, each record was re-assessed for content in seven areas—Acquisition Date, Accession Date, Description, Wreck ID, How Acquired, Condition and History.

Results for this assessment are interesting due to the number of records missing information in what could be described as key areas (Abell-Seddon, 1989:64; Robins, 1992:60). Description and Wreck ID were the only two fields constantly completed across all museums with only eight records missing both (Figure 6). These eight records are from Port Elliot Railway and Seaport Museum, for which no registers exist. Conversely, the acquisition date is most commonly absent. While this date may have no application outside of registers, it is a key part of administration generally required for all businesses including museums (Robins, 1992:60-63). Perhaps the most surprising results are the number of records (408) without a condition report, either original or following conservation. Similarly, 430 records lack information on artefact and shipwreck history, excluding wreck identification. With a wealth of information available on Australian shipwrecks, this large number is perhaps solely attributed to staff lacking time or incentive to record some of this knowledge. A similar number of records miss information on how and when museums acquired items. These results were expected, the author observing the lack of recorded information during data collection.
4.4 Missing Information: Museum Averages

Using the results outlined above, individual museums were compared against each other. Shown in Figure 7, the comparison details each register field and the percent of museums incorporating and lacking that information. The results outlined in Figure 6 also apply to Figure 7—the only difference being a reversal of the results for Condition and History, indicating that while there are more records featuring historical information than conditional, these records are restricted to fewer museums. Again, the 5% of museums without Description and Wreck ID result from Port Elliot Historic Railway and Seaport Museum's (M16) lack of register. It is somewhat surprising to see that only half the museums in South Australia have any type of date recorded, either for acquisition or accession, which leads to questions regarding artefact intake and the time between acquisition and accessioning which
cannot be accurately discussed. Many museums simply assume that fields will be considered 'filled' even if no information has actually been recorded. This is true for the 35% of museums without data detailing how items were acquired—several museums indicated that 'all the items are donated' but this is not physically written down.

Observing museum results individually shows where each museum needs improvement. Ideally, all museums should have the majority of fields entered with some information. Unfortunately only two museums on average have achieved this (See Table 7). The Encounter Coast Discovery Centre (M15) and the Goolwa National Trust Museum (M17), highlighted in green in Table 7, show that it is
possible to maintain a constant level of information across a register. It should be noted, however, that M15 declined to provide a register for these items, as aforementioned, therefore the consistency seen here is from the DENR Relic Report and 2009 Audit. M16 also lacks a register, and therefore has no data in any field. Overall many of the registers are only lacking data in one or two fields, although subsequent assessment would need to be made to address the quality of each field, an example of which can be seen in the Archaeological Rating Analysis.

<table>
<thead>
<tr>
<th>Museum</th>
<th>Acquisition</th>
<th>Accession</th>
<th>Description</th>
<th>Wreck ID</th>
<th>How Acquired</th>
<th>Condition</th>
<th>History</th>
</tr>
</thead>
<tbody>
<tr>
<td>M01</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>M02</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>M03</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>M04</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>M05</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>M06</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>M07</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>M08</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>M09</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>M10</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>M11</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>M12</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>M13</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>M14</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>M15</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>M16</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>M17</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>M18</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
</tr>
<tr>
<td>M19</td>
<td>N</td>
<td>50/50</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>M20</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
</tr>
<tr>
<td>M21</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>M22</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>M23</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>N</td>
</tr>
</tbody>
</table>

Table 7: A detailed look at each museum and where Register areas, on average, are missing or contain information. M16 (highlighted yellow) keeps no register, whereas M15 and M17 (highlighted green) on average have perfect recording. M19 note that there were an equal number of records with/without Accession data.
4.5 Donation vs Archaeology

One underlying theme for this thesis is discovering how artefacts were removed from the shipwreck site and added into museum collections. This is analysed by a comparison of the number of donated items and archaeologically excavated relics as, evidenced by the above results, little information concerning the specific history of artefacts has been documented. The results of this can be seen in Figure 8—90.85% of items on display in South Australian museums were donated from the public. With further research it could be determined when these items were donated and this could be used to produce an artefact intake chart, although problems concerning the small number of records with Acquisition and Accession dates have already been mentioned. This suggested chart would be useful in

Figure 8: The percentage of donated artefacts as compared to scientifically excavated (archaeologically recovered) artefacts, currently on display in South Australia.
assessing whether new shipwreck artefacts are currently being accessioned into museum collections. Due to the large portion of donated items, the results were further broken down into the general type of donation derived from the records themselves. Perhaps the most surprising result is that 34 records list 'salvage' as the method of recovery and donation (See Table 7). It was not anticipated that many donors would admit to removing artefacts from shipwrecks since this operation is now illegal under both the Commonwealth and South Australian Historic Shipwrecks Acts (Commonwealth Government of Australia, 2011; Government of South Australia, 2011). The term 'salvage', taken directly from artefact records refers to individual collectors, rather than commercial salvage. Interestingly, 'diving clubs' donated the same number of relics as those listed under 'salvage'. Both 'salvage' and 'diving clubs', with the addition of 'loans from private collections', make up the largest sub-categories for donation.

Further points should be made observing the three major areas depicted in Figure 8. There is a large number of donated items (263) without a subcategory. There are also 214 records without acquisition information, although for many of these the artefacts are probably donated. Both of these results display how much room for improvement there is, in both recording information in all fields and the level of information recorded. All archaeologically recovered artefacts came from DENR, including the item on loan from the Goolwa museum. These archaeologically recovered items can also be interpreted further. While records for these relics are more likely to contain dimensions and 'finder' details including location, overall they
are at the same level of recording as publically donated items. This calls into question the idea of storing archaeologically recovered items in museums, where information can be lost or never included in artefact record documentation.

### Donation vs Archaeology Breakdown

<table>
<thead>
<tr>
<th>Donation</th>
<th>#</th>
<th>Archaeology</th>
<th>#</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donated</td>
<td>263</td>
<td>Donated - DENR</td>
<td>1</td>
</tr>
<tr>
<td>Donated - Anon</td>
<td>1</td>
<td>On loan from DENR</td>
<td>57</td>
</tr>
<tr>
<td>Donated - Council</td>
<td>3</td>
<td>On loan from Goolwa Museum</td>
<td>1</td>
</tr>
<tr>
<td>Donated - Diving Club</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated - Flotsam</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated - NT</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated - Purchased</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated - Salvaged</td>
<td>34</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated - SA Museum</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donated - School</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On loan from DENR</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On loan from Private Collection</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On loan from RGSSA</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>On loan from SA Museum</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salvaged</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>372</td>
<td>Total</td>
<td>59</td>
</tr>
<tr>
<td>Not Recorded</td>
<td>214</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Table 8: Breakdown of Donated and Archaeologically recovered artefacts. Note the second listing of 'Salvage', included due to lack of donation or loan clarification. |

### 4.6 Government Reporting: Relic Report and 2009 Audit

Important to this study is the DENR Relic Report and the 2009 Regional Museums Audit. Both are simple indexes with basic data for all shipwreck artefacts reported to the Government. The 2009 Audit was conducted to update the Relic Report but they have yet to be compiled into one document. Examining further information within both reports, and as a result of necessity in some cases, further sub-questions were asked. Focused around how accurate these reports are, not in terms of specifics but whether all the appropriate items are listed, these sub-questions
pose a further study into the administration of museums and their relationship with
the government. A comparison from the two reports and the database compiled for
this thesis answer these questions. Within the DENR Relic Report only 309 records
could be linked to the artefact database, leaving 336 relics unlisted (Figure 9). An
analysis between the database and 2009 Audit produced minimally better results—
289 records could not be located in the audit (Figure 10). Although this difference of
47 records appears promising, it must be remembered that many records only
appear in one report and not in the other. Items originally listed within the Relic
Report, and currently still on display, are missing from the 2009 Audit—an error
that would substantially increase the results above. Conversely, an investigation
into the number of records on the database that were not included on either report
was analysed. In total 189 records, representing artefacts currently on display, are
missing from the government records or cannot convincingly be associated with
possible entries (See Figure 11). It could be possible that the number of items not
listed, are not considered by museum staff as shipwreck artefacts. This seems the
most likely explanation although a number of other explanations, like simple human
error, could be also true.
Records Listed on DENR Relic Report

Figure 9: Chart showing the number of records within this research’s database, included/not included on the DENR Relic Report. 645 records have been included in the database.

Records Listed on DENR 2009 Audit

Figure 10: Chart showing the number of records within this research’s database, included/not included on the DENR 2009 Audit. 645 records have been included in the database.
4.7 Summary

Results for this research clearly show the need for improvement within museum registers. In South Australia, 93% of museums with shipwreck artefacts have little or no information regarding provenance recorded in their registers. Similarly, 87% of records do not fulfil museum Collection Management Policies. Both results demonstrate the lack of detail within museum records. The analysis of record fields also reveals a lack of detailed information. This analysis reveals an overall need to include all information possible into records, as two museums successfully accomplished. Lastly, is the depiction of donated vs archaeologically recovered artefacts, producing a detailed look into how artefacts make the journey from shipwreck to museum collections. These results are discussed in Chapter 5 with possible solutions.
5 DISCUSSION

In this chapter the results are further discussed, identifying explanations and solutions. A study of the bigger picture was necessary, both within Australia and internationally, across different relic types and other museum collections. Finally, this chapter summarises thoughts on how to improve museum registers within South Australia and how to ensure that information exists for use in the future.

5.1 The Problems with Registers

5.1.1 Register Books

Many of the results outlined in Chapter 4 were expected, but shocking nevertheless. The number of records not documented properly, missing key pieces of information and those not included in government records, is perhaps a remnant from the early beginnings of the collections. This theory was confirmed when discussing this research with museum staff, as many excused the disarray of registers with responsibility falling on original curators or collection holders. Before the onset of technology, registers were recorded by hand in register books, catalogue cards and some not documented at all, simply relying on the owner/curators memory (Krakker, et al., 1999:12-13). These methods of recording are still in use today with few making use of available technology—approximately half the museums represented in this study rely on register books that date back to the founding of the museum. This is perhaps a result of the age demographic that maintain museums. It appears that volunteers at museums in regional areas offer their services in their retirement (with the occasional younger enthusiast joining the
staff) many of whom are less comfortable with new technologies. That is not to say that all museums with retired volunteer staff rely on cheaper, financially sustainable, handwritten records. Conversely, a few have implemented database software like MOSAiC or other programs designed for museums. Those institutions that use computer software have only one or two people with proficient knowledge of how to operate it completely. The author witnessed this firsthand when visiting museums whose staff assisted with the data collection for this research. Nevertheless, this technological difficulty is relevant in surmising problems with record keeping in museums.

While current museum staff point to past practice as an explanation of register incompleteness, some examples can be seen of the same practices continuing into the present. It is difficult to pinpoint new items in some registers due to lack of dating. However, in others, there is little change between the level of information recorded in the 1970s and 2000s. This indicates current bad practice in direct violation of their CMPs and recognised museum standards.

### 5.1.2 Handwriting

Further problems with record keeping also encompass handwriting itself. Having viewed handwritten documents in this research and other studies, it is quite obvious that some handwriting can be very difficult to read. A common fact some might think, but an understanding of how handwriting affects museum registers is another reason why some catalogues are missing information. An example of this can be seen within the Port Adelaide Nautical Museum Collection (PANM), held by
SAMM. Once the PANM collection was moved into the care of SAMM (Page, 1981:203-213), and was later included within its register, the original record books were transcribed into the KE EMu software system. These books were originally viewed with amazement during data collection due to their wonderful display of calligraphy. The first writer in the register had handwriting that was easy to read. However, subsequent writers seemed to begin writing with smaller, linked script, decreasing to the point where many words were illegible. This would have posed a problem during the transcription from paper to screen and may have resulted in either information wrongly transcribed or left out entirely. While little can be done to change the handwriting of 50 years ago, it makes more sense to alter the present way of recording in order to prevent illegible registers from continuing in the future.

5.1.3 Community Attitudes

Some aspects from individual results may also give clues to why numbers were negative. As can be seen in Table 4 and Table 5 in Chapter 4, which show the top 10 artefact records for both archaeological and CMP focused information, the South Australian Maritime Museum and Port MacDonnell Maritime Museum achieve best. These results can be further contemplated by looking at whether the local relationship with maritime history has any impact on the recording of shipwreck items—either the town has a rich and colourful history with shipping/ports or it had isolated shipwreck events. Both Port Adelaide and Port MacDonnell have long histories with shipping and shipwrecks (Fowler, 2011:1-2; Page, 1981:15-16). The community takes pride in their maritime past, which is reflected within their local area, historic walking trails, anchors, murals, and the museums themselves (Figure
12) (Admella Commemoration Advisory Committee, 2009; City of Port Adelaide Enfield, 2009; Heritage SA, 2002). This maritime mentality or focus within the community provides a link from early history into the present that can be seen elsewhere in Australia (Fowler, 2011:18-19). Interest levels of volunteers and curators within these areas are likely to be affected by this, causing them to record more complete information. Conversely, those towns without major maritime history may be less interested in their shipwrecks and focus on the main trade of the town. It could also be said that the type of museum, such as maritime, district, or courthouse, reflects where effort is placed. An example may be the Willunga Courthouse museum with its Star of Greece display. The museum has a focus on the old courthouse building and its history. However, the Star of Greece display, related to the courthouse theme through an individual linked with the shipwreck, may hold a weaker bond than other items. Therefore less, or conversely more, effort may be
placed in managing the display including its records. This is an unproven theory and could not be examined within this research although it requires further investigation. It is proposed that the main reason for the wide discrepancy between records and Museums lies with the staff and problems of time and knowledge.

5.1.4 Volunteers

Key to this discussion is that volunteers run the majority of museums. History SA provides a service that guides many museums providing practical advice, grants, event advertisement, and explanations of how to run a museum (History SA, 2008). Aside from this help, museums are left to run themselves. Knowledge specifically relating to shipwrecks and their artefacts may not be included in training, or covered only to a small extent. Each museum also has individual recording forms and styles that volunteers may be trained to complete. Amongst this training several points should be emphasised to correct the discrepancies viewed within the results. The biggest problem associated with this research is making sure that all necessary register headings are filled out. Seven headings used within the database compiled for this research should always have information—Date Acquired, Date Accessioned, Description (including the name of the object), Wreck ID, History, Condition and, How Acquired (in detail) (Cordato, et al., 1982:4-7; Robins, 1992:60-63). However, across the different styles of recording information, there are many ways of interpreting the object forms. Those forms created with certain types of artefacts in mind are not always suited to other types of artefacts, which may require broader or more specific information than the form allows. When these ill-prepared forms are completed, some interesting, but uninformative, results occur.
As can be seen in Figure 13, the recorder of this item, at a loss of what to write, has ironically written the answers most obvious. For this particular form, it would not be too difficult to use a perspective that enables shipwreck artefacts to be recorded, although it has evidently been prepared for contemporary historical relics. It is apparent that some forms need to be updated or staff given better training to more easily record artefacts without problem.

![Figure 13: An excerpt from an object recording form included in this research. The recorder was obviously unable to understand how these points could be answered, when writing about a shipwreck artefact. Photo: C. Morris.](image)

Nevertheless, volunteers are quite simply giving their time to museums. As mentioned afore, many are in retirement and work within museums purely due to their interest in the history contained therein. Time-management problems, including staff with other paying jobs that take preference and restricted opening hours also impact records. This enforces why donations need to be recorded at the time of contribution, as otherwise records may not be completed for some time and information could be misplaced or lost.
5.1.5 *There is no Information—is There?*

The obvious argument to be made is that there is no information to record about many of the artefacts. While this may be true in some cases—for instance items without shipwreck identification, provenance, or those that have been anonymously donated—information relating to the donors, how they came by the item, memories about the item, the shipwreck history itself, and object identification, all contribute toward the artefacts' meaning or history. However, the key to obtaining this information from donors is to ask the right questions. Without in-depth knowledge of how museum staff record necessary information from the donor about their items, which is a study beyond this research, it is difficult to point out where improvements need to be made. Despite this, museum staff should concentrate on asking the right questions to bring out stories concerning donated relics. In many cases it may be necessary to audio record conversations, with permission of the donors, which can then be transcribed so that a complete record is produced. Some aspects of documenting a donated item should reflect the method of recording an oral history. Oral histories are carefully prepared, with vigorous planning and research undertaken to ensure policies and ethics are upheld. While a strict regime is already undertaken when items are donated, it is the questionnaire planning that holds answers to improved reporting. An item's history may be recorded better by developing and knowing what questions to ask. Writing questions for oral histories or interviews are broadly covered in many texts (Bolton, 1994:19-23; Quinlan, 2011:29-34; Robertson, 2000:22-28; Sommer and Quinlan, 2002:68-73; Veale and Schilling, 2004:22-24), the suggestions in which could easily relate to museum use regarding donations. Museums record
information so that each object has a story, otherwise a collection of artefacts would be without history or importance, and the public would have nothing to connect with. A description of oral history by Paul Thompson (2000:24) highlights similarities in why museums would record information:

"Oral history is a history built around people. It thrusts life into history itself and it widens its scope. It allows heroes not just from leaders, but from the unknown majority of the people... It brings history into, and out of, the community... It makes for contact—and thence understanding—between social classes, and between generations. And to individual historians and others, with shared meanings, it can give a sense of belonging to a place or in time."

This discussion of oral history could easily be used to describe a museum or what a museum would like to portray. Therefore it is not a large mental leap to include the policies, guidelines and practices of oral history for the use of a higher standard of recording artefact donations. However, developing questionnaires for wide use amongst museums, and allowing for all artefact types, would be an outstanding feat. Likewise, staff would have to undergo some training concerning interviewing skills, including the use of pro forma and listening to the interviewee in order to respond and attain further information. With this training and the development of fitting questions, relic information would be far more complete and informative than currently observed.

5.1.6 Shipwreck Training

Further training can also be the answer to explaining the results seen in Chapter 4 concerning the DENR Relic Report and Audit. Results show that not all shipwreck articles are reported to DENR when they are accessioned or, rather, many pieces that have been in collections since the 1970s have been overlooked. In total there
are more artefacts listed in the 2009 Audit but many present on the Relic Report are not repeated. Comparing artefacts listed to those not included shows a trend of not reporting less known or obscure shipwreck relics. Nearly all the artefacts from well-known shipwrecks along the coast have been listed. From these findings it appears that staff reported only those items that they think DENR want to know about, rather than all the items they have in their custody. However, this observation changes when personal experience in dealing with the museums of South Australia is included. In some instances museum staff members were unaware that 'shipwreck artefacts' were on display. It is believed that the use of the word 'shipwreck' does not properly convey its meaning within museum staff, instead what most likely comes to mind is a romanticised image of ancient vessels, Australia's earliest shipwrecks, and tragic circumstances. While this is a correct interpretation of the term, it forgets to include the base meaning of 'shipwrecked', that is a ship/vessel that is sunk at sea through uncontrollable circumstances. The author, when visiting museums, often heard the sentence "I don't know if it shipwrecked but it is from a boat". These items often proved to be from shipwrecks, although not always were they listed on the Australian National Shipwreck Database. However, without knowing what items came from shipwrecks how can staff report the correct items to the Government? While this leads back into the issue of information levels recorded at the time of acquisition, it also points toward needing further training for museum staff in order for them to understand shipwrecks, what to record, and what to report. This in turn would also then enhance visitors' experiences within museums, providing accurate and interesting tours through collections.
5.1.7 Labels

While not a part of the registers themselves, labels play a key part in a visitors' museum experience. Label text was noted during data collection in order to compare the information given to the public against that recorded for administration purposes. While this was not quantified or qualified like the other results, simply comparing the information within the database was sufficient to grasp many problems with the text on the labels. Label text also ensured artefacts were matched with their correct corresponding register entry. However, this lead into further problems including shipwreck names not matching, donors not matching (where included) and even the lack of labels created issues of not knowing what name the item was listed under. Perhaps the most noticeable difference between labels and registers was the inclusion of information not recorded in any corresponding artefact documents. Often this was a story of how the item was located or family histories attached to it; both of which should be recorded in registers (See Figure 14). Should these labels be lost, it would be difficult to replace the information, an unnecessary loss that may reduce an item's context and provenance. Three suggestions can be made to assist in correcting the main problems seen when collecting data for this research—all information should be recorded in the museum register and relevant artefact forms, with electronic and paper duplicates; labels should be written with correct and accurate information; and simple labels should be attached to most items on display, consisting of the relic's name and shipwreck, or group labels used with a similar information.
5.2 The Bigger Picture

Although South Australian museums are the focus of this research, it is likely that many regional museums across Australia would produce similar results under the same study aims. In Australia little has been written concerning museums and their records indicating a lack of awareness and development while other countries progress and integrate new ideas. Computerising museum collections has been undertaken since the 1970's in England and America with many museums releasing partial or complete online catalogues in past years (Abell-Seddon, 1989; Baron, 1989; Krakker, et al., 1999:9, 12-14; Metropolitan Museum of Art, 2012; Philadelphia Museum of Art, 2012; Sabin, 1997; Smithsonian Institution, 2012; Trustees of the British Museum, 2012; United States Holocaust Memorial Museum,
Problems encountered by English and American museums, such as format, software and time among others, are addressed within this study. However, it is beneficial to look into the trial and error methods of others in order to formulate the best course of action for Australia. Perhaps the biggest problem faced at the time by museums and collection holders was the developing aspect of database systems, resulting in software that was difficult to understand and use (Abell-Seddon, 1989; Baron, 1989; Krakker, et al., 1999:13-14). Time management is another major problem which museums may be reluctant to address, as converting records takes years and can be costly. However, it is time taken in anticipation of the next step in the journey: online catalogues.

While many museums computerise their registers in an effort to simplify the recording process, it also enables them to consider online catalogues in the future. Within Australia there has been some production of these online catalogues throughout the major museums in each state, including South Australia. These catalogues are constructed around photographs and take a variety of formats, from archaeological relics photographed with a scale, samples of each collection artistically captured, to encompassing the museum’s entire collection including items currently in storage, all with associated text (Museum Victoria, 2012a, b; National Museum of Australia, 2012; Powerhouse Museum, 2012; Queensland Museum, 2011; Western Australian Museum, 2012). The South Australian Museum has only digitised the permanent exhibitions on display, not materials or collections in storage, aptly entitling them 'online galleries' (South Australian Museum, 2011b).
Both major South Australian museums, SAM and SAMM, have previously or currently featured online exhibitions (South Australian Museum, 2011a). These online displays can be permanent or temporary, and take a variety of formats. SAM's online galleries are constructed as slideshows or interactive displays, allowing for easy access and small essential sections of text, whereas their online exhibitions, some dedicated individual websites, contain more in-depth text together with relevant images. Interestingly, SAMM and DENR are currently in the process of creating online catalogues, a development that takes many years of trial and error and will never be fully complete due to the ever growing nature of collections (Jateff, E. 2011 pers. comm.; Khan, A. 2012 pers. comm.). When these online catalogues are released, they will enable the public and researchers to easily search through South Australia's past.

There is also a necessity of well kept records when it comes to theft. A particularly good example of theft is presented during the Iraq War and the sacking of the Iraq Museum in 2003. While the sacking of the museum is well documented within the media and by scholars (Anonymous, 2003:16; Childs, 2010:198-200; CNN, 2003; Fray, 2003; Lawler, 2003; Lemonick, et al., 2003; Polk and Schuster, 2005; Rothfield, 2008), one particularly telling account can be seen in Matthew Bogdanos' "Thieves of Baghdad" (2005). Bogdanos' account from his perspective as a US Marine within the Iraq Museum in 2003 allows for an in-depth look into what happened and the journey to re-establish the collection. He notes that "the museum's storage room contained hundreds of thousands of catalogued items and not-yet-catalogued pieces from more than thirty sites of extensive excavation..." (Bogdanos, 2005:139).
The surviving items had to be compared to excavation catalogues to discover what items were missing as many registration cards were destroyed during the looting (Bogdanos, 2005:141). While this inspection was undertaken, Bogdanos’ team also created a backup database of all the museum’s holdings from lists supplied by staff members (Bogdanos, 2005:141). This individually gives evidence to the importance of well kept documentation on all museum items as, although Australia is not currently suffering an invasion, theft and natural disasters (flood, fire) can occur at any time. Furthermore, Bogdanos attempted to catch the looters by circulating photographs of the missing items to customs and border officials. Unfortunately decent photos were not always available either due to bad quality or they were nonexistent (Atwood, 2004:11; Bogdanos, 2005:153-154). When thought of in terms of South Australian museums, many do not have a photograph on file and cannot boast a detailed recording of artefacts within their care. Information within registers should be sufficient to reconstruct a general overview of the item, allowing for research to be undertaken—although not every question a researcher might ask could possibly be recorded. Stock-take conducted yearly would help to control both the gaps in registers and item movement. In some cases this is conducted in South Australia but would become a huge undertaking for larger museums. When speaking of the artefacts taken from the Iraq Museum, it may be that the importance seems greater for items dating back 4,000 years or more, than compared to items within regional South Australian museums. However, to the community and the people of Australia, artefacts, irrespective of age, are a part of the nation and states history and should be cared for as such.
5.3 Fixing the Problem

To fix the problems within museum registers the question that should be asked is "What will happen if nothing is done?". Without fixing any problems, the future consists of museums with unprovenanced items without shipwreck identifications or family histories, unable to interest the public in the depths of South Australia's maritime history. This is already beginning with regional museums struggling to stay operational due to lack of interest (Yorke Peninsula Country Times, 2011). Additionally, should no action be taken, little information will remain for future generations. If a museum closed and its artefacts sent to another museum or placed in storage along with the original registers, those records would be the only information available. This places great importance on recording correctly, in detail and legibly so that someone else can understand and recognise which artefacts are which, without guess work.

The key to retaining information within registers is to begin making changes now. While little can be done for the items recorded 70 years ago, a greater knowledge base can be obtained in future. As suggested in this chapter, oral histories would be a useful addition to museum registers. Having a history of the item on hand would make creating exhibitions and labels easier, and the public may take more interest. Museums have become stagnant (Fopp, 1997:143; Kennedy, 2012), many never changing or updating displays to grab a younger audience and make education fun. While within regional museums it is common for everything to be on show at once, it would be beneficial if artefacts were rotated, allowing for something new to be seen with every visit. Currently these museums display shelves laden with items,
many without labels, enforcing an exit minded strategy in the public. Updating to computerised registers would allow for more recording room, rather than limited to a singular line within a ruled book, and would allow for the storage of photographs and label information. However, drawbacks of these suggestions are time, manpower and funding, which are not easily available to many museums. Fixing the problems within museums is a long term commitment requiring help from all aspects of museums, communities and government.

5.4 Information for the Future

The short title of this thesis is "Information for the Future", which is exactly what museums should have listed in their registers—information about relics preserved for future generations to learn from. However, what is shown in the results of this research is that across South Australia this information is not recorded and is lost. Some discussion has taken place on how to fix or change registers, all needing more funding, time and manpower than is available. Museums within this research are already making some of these changes, or have completed them prior to this study. However, when looked at as a whole, there are vast gaps within the information being recorded. Standardisation is needed, especially in order to fill these gaps and monitor the artefacts within museums' care.

Other countries have introduced standardisation into their collection recording. In the UK the Museums and Galleries Commission raised the issue of data standards when computers were increasingly used for museum collection management (Sabin, 1997). This led to the creation of recording guidelines and museum database
software, as well as a web-based database project (Sabin, 1997). Canada has also created a national inventory of its museum databases. Run by the Canadian Heritage Information Network (CHIN), the database contains over twenty-five million objects from collections across Canada (Sabin, 1997). In addition to other data being available, such as information on archaeological sites, reference aids, and research aids, CHIN released the Virtual Museum of Canada (VMC) in 2001 which contains virtual exhibits and interactive games (Sabin, 1997; Soren, 2005:131-135). Within Australia similar standardisation would be of benefit. By standardising museum registers from a government level, and educating staff in proper recording methods, several important changes would occur:

- All information recorded would have to meet specific requirements, combating the problems encountered with missing information in registers;
- Information could be stored electronically with backups, ensuring against damage by fire, theft and wear over time;
- Government departments like DENR would be able to easily keep track of artefacts, with access to full information about the items;
- An online database could be constructed allowing for information to be entered directly from museums, which in turn could be viewed in part by the public;

These changes would address many of the problems identified within this chapter, ensuring information is recorded properly, in detail, for future communities, individuals and researchers alike.
6 Conclusion

This thesis has studied museums and their registers, recording methods and shipwreck articles on display. Museums in South Australia were consulted to find many surprising results in order to answer questions of how much information they recorded and how many artefacts came from scientific excavations. These results show the need for change within museum recording and a need for further training and support.

6.1 Answers to Three Questions

In the introduction, this thesis set out to pursue the following questions:

1. What percentages of shipwreck artefacts, currently on display in South Australian museums, have been scientifically recovered? If not recovered within the scientifically acceptable parameters, how have they been retrieved?

2. What level of detail are South Australian museums recording when accessioning shipwreck artefacts into their collections? Does this meet museum Collection Management Policy requirements and/or accepted archaeological method suggestions?

3. Are there individual fields that are regularly missing information in museum registers? How much information recorded relates to the provenance of the item specifically?

While the answers are clearly addressed in Chapter 4, it is the discussion detailed in Chapter 5 which further explains why those results eventuated, giving a greater understanding of the complexity of this topic. A succinct answer to each question can be formulated, but highlights more questions to answer. Answering the first question was gathered from studying the records of artefacts and assess what was recorded in terms of donation details and history. Shown in Chapter 4, this question
revealed that 57.67% of artefacts were donated, 33.18% were not sufficiently recorded to indicate donation or scientific recovery and only 9.15% were recovered within archaeologically accepted parameters, therefore 6 out of 10 relics were donated by members of the public. The public is unlikely to view items recovered from controlled archaeological excavation when visiting museums in regional areas, with the exception of Ardrossan Museum, Goolwa National Trust Museum, and Swan Reach Museum. This lack of archaeologically recovered artefacts on display reflects the current professional practice of in situ preservation, but leaves the public to view little that represents the discipline. Instead, a variety of donation methods can be seen, the most common being recovery by diving clubs and salvage. A total of 15 different donations methods were recorded, in addition to a sufficient number of records (214) that had no recorded donation method. This provides an answer to the second part of the first question, although raises questions as to whether legislation was effective when introduced and whether it was understood correctly by the public at the time and at present.

Addressing the second question required an in-depth study of museum records and the development of a categorisation system. Only 10 records contained enough archaeological/general information to be given a near perfect rating of 'A'. As discussed, studying the museums and their organisation reveals patterns in both the 'A' and '1' top ten records, both of which hold the key to answering the second question. Addressing the second part of question two was studied first as it was from this data that an average between the two ratings was formed, revealing the answer to the first part of the question. The answer to "what level of detail are
South Australian museums recording when accessioning shipwreck artefacts into their collections?" is a very simple summary, again raising further discussion. Of the 23 museum included within this research, one was given a '1' rating and one a rating of '2', although there are two further museums which fell just short of achieving a '2' rating, indicating that the majority of museums are not properly recording artefacts. Swan Reach Museum, who received a '1' rating, has only one shipwreck artefact in its collection, which is well recorded, therefore giving a slightly misleading positive result. Overall the answer to the second question is that there is very little detail recorded, no museum fulfils accepted archaeological recording practices and only two museums fulfil their Collection Management Policy requirements. Clearly this indicates room for improvement in the future.

The third question, which is an extension of question two, studies the individual fields of information in museum registers. Revealed previously, only two of the seven fields were completed in every museum record with the exception being Port Elliot Railway and Seaport Museum, which did not have a register and, therefore, resulted in a lack of data. Conversely, acquisition date and history were the least completed fields. Data from two museums could be averaged to a 'perfect' register, meaning that each of their fields had information, although the content of the information was not assessed. Therefore, the answer to "Are there individual fields that are regularly missing information in museum registers?" is yes, only two fields are consistently completed. Similarly, the response to the second part of the question "How much information recorded relates to the provenance of the item specifically?" is little as evidenced by the number of registers missing any recorded
history. A great deal of information can be lost when artefacts are accessioned into museums, a claim that is supported by the results and further heightened by the added evidence within the Discussion.

6.2 Recommendations

While problems and solutions have been discussed in previous chapters, a succinct account of those issues and recommendations is included here. Many problems highlighted by this research, such as handwriting, recording space, and age, deal directly with the problem of a physical register book. To address this, it is recommended that registers become computerised, although there are many problems further associated with this, including software choices and limitations, staff knowledge and time. Furthering the computerisation of registers, a standardisation should be implemented, perhaps extending into an online editable database. This standardisation would kerb the problem of missing information within registers, encouraging staff to fill each and every section to the best of their knowledge. Further training and education into using computer software would be needed, as well as for understanding and recording shipwreck information and using oral history to support artefact stories. However, the major problem that needs addressing to complete these recommendations is funding. In lieu of this funding there are several simpler, smaller steps that can be implemented to assist museums. Ensuring that handwriting is neat, that everything known about the artefact is written down, and completing a stock-take in order to assess that descriptions and label information is correct and recorded, are three cost efficient methods of maintaining registers. If an artefact is not recorded, create a record and
include any research conducted. There are also other points that need to be addressed, discovered when initially attempting to contact museums, such as ensuring phone numbers are current and updating website information including on pages such as Google maps, Collections Australia Network and community and state sites. These contact problems, present for the author, will also likely be encountered by the public should they want to visit museums. Addressing the problems listed here, whether funding is available or not, will help museums provide a more enjoyable time to visitors and will assist researchers, enthusiasts and interested parties in future.

6.3 Future Applications

This study focused on South Australian museums with shipwreck artefacts currently on display. However, it could theoretically be expanded to cover other artefacts types and other states within Australia. Results uncovered within this research could be used to create recording guidelines, or help regional museums to understand the importance of recording in detail. A copy of this thesis will be provided to all museums within this study, on account of the interest given in the results, and to enable them to address the problems uncovered. It would be enlightening to repeat this study again in future, to re-assess the recommendations provided, their implementation and the overall quality of registers. This repetition would hopefully reflect an increase in documentation.

In conclusion, this study has efficiently answered the question originally set out, analysing the number of donated artefacts against the number of archaeologically
recovered items, how those relics were donated, the quality of registers across South Australia, and specifically the amount of information available on provenance and artefact history. While the results were somewhat expected, they were still surprising when assessed overall. Further still, addressing those results and finding solutions has resulted with a recommendation to rework the entire museums register/database method—with the only drawback being funding, time and manpower—and to introduce standardisation across South Australia. While these recommendations are unlikely to take place immediately, in future they will become necessary. Despite this, further individual efforts will be made to convey this recommendation to museums within Australia in order to ensure that the past is properly preserved for the future.

"In our world, there are no magic wands or pensieves. Human memories fade, and can be completely lost when people die; events can be mis-remembered or forgotten. But thanks to the careful work of our archives, galleries, libraries and museums, the evidence of past events and practices continues to be preserved." (Birtley, 2006)
APPENDIX 1: GUIDE TO MUSEUM DATABASE

General Notes
Extra information from the DENR Relic Report and 2009 Audit has been included where applicable. This information is identified by "Relic Report -" or "2009 Audit -", and has not been included in any analysis aside from where no other record information is available. Where this is the only information available, it is noted in the 'Notes' section.

All shipwrecks have been given type and year by the researcher. Any errors in this are completely at the fault of the researcher. Where unsure of a specific wreck's identification, no extra information was added.

Donor names have been removed from the database, replaced by '....' when used within historical information. However, some donor names may appear within photographs of artefacts and labels.

Where 'See Notes' occurs, the volume of information was unable to be entered within the field, and has been included in the larger field.

Museums Notes
M01–Entries were emailed to the researcher. Therefore, all information was taken from the photographs provided.
M02–Entries were emailed to the researcher. Label information has been included where visible in photograph, but has not otherwise been noted.
M03–A register and an index card system were in use. Therefore, register information has been used as the main source, with index card information added where applicable. Indicated by "Index Card - ".
M04–Access to register was declined due to current computerisation and sorting. Information is taken from labels and the Relic Report/2009 Audit.
M05–Contact with the Curator could not be established and as such the register was inaccessible. Information is from label.
M06–Some original register entry numbers are present in 'Notes' which assisted in linking artefacts to their correct register entry.
M07–Three registers apply to the collection, the original started in ~1970, a stock-take conducted 2003 onward and an electronic version of the stock-take. No attempt had been made to link the original register to the new register, therefore in the 'Notes' section this has been conducted where possible. PV numbers refer to the new register where as Book/Page numbers refer to the old register. Information in the electronic version usually matched the hard copy, however where information differed, notes have been made. All notes on differences between registers are within the 'Notes' section. Within other sections, the new register has
been used as the main register, and differences to the original have been added in brackets afterward—all information from the original register is included in brackets.

**M08**—No contact could be made with the museum, to either view in person or digitally. Therefore all information is taken from the Relic Report and 2009 Audit, with no photographs or labels. It was assumed that this is the base level of information in the museums register.

**M09**—All items are on loan from DENR, therefore all information is taken from the Relic Report and 2009 Audit. Due to recovery nature some archaeological position information has been recorded.

**M10**—Due to nature of display and register, few items were able to be connected together. Therefore all items on the Relic Report/Audit were included, displayed or not, as well as those on display not reported. Within the 'Notes' section, items have been identified as to which list they are included on and accession numbers where possible.

**M11**—No additional notes.

**M12**—Specific collections have been noted where applicable due to accession information related with them.

**M13**—Index cards were the only form of register used, and these were summarised in email correspondence. This has been included and noted accordingly. Newspaper articles/cuttings have also been mentioned, but have not been included in the research.

**M14**—Further research by the manager has been included as well as information provided by a volunteer (who lived in the area his entire life), but was not included in the research.

**M15**—All items are on loan from DENR; therefore, all information is taken from the Relic Report and 2009 Audit. Due to recovery nature some archaeological position information has been recorded.

**M16**—No register is kept for this museum. Information is from the Relic Report/Audit and any labels. Due to the nature of the display, not all items listed may be from shipwrecks.

**M17**—No additional notes.

**M18**—Item is on loan from M17 and therefore information has come their register as well as label information.

**M19**—No additional notes.

**M20**—No additional notes.

**M21**—No additional notes.

**M22**—No additional notes.

**M23**—Some photos taken by the researcher in a prior visit and others provided by DENR. Label information is not listed due to visibility in photos or lack of photos.
APPENDIX 2: MUSEUM DATABASES
* These databases are not available to the public due to the protection of privacy and the inclusion of sensitive information. Data may be provided by special request.

APPENDIX 3: DATABASE MASTER INDEX LIST
* This list is not available to the public due to the protection of privacy and the inclusion of sensitive information. Data may be provided by special request.
REFERENCES


2011.


Fowler, M., 2011, *Giving a Name to a Place: Shipwrecks in Port Macdonnell, South Australia*. Honors Thesis for Bachelor of Archaeology, Department of Archaeology, Flinders University of South Australia.


Loney, J. K., 1971, *Wrecks on South Australia’s South-East Coast : Shipwrecks and
Strandings from Port Macdonnell to the Murray River. Apollo Bay, Victoria.


Museum Victoria, 2012b, Collections Online -Museum Victoria.


Richards, N., 2007, The History and Archaeology of the Garden Island Ships’ Graveyard, North Arm of the Port Adelaide River, Port Adelaide, South Australia. Bachelor of Archaeology (Honors), Department of Archaeology, Flinders University of South Australia.


