

**99 年人文教育革新中綱計畫**  
**子計畫三 人文領域人才培育國際交流計畫**

**【補助類型-海外活動類專題研究】**

**【澳洲國家圖書館保存修護部門 實習計畫】**

**期末成果報告**

**指導暨補助單位：教育部**

**指導單位：教育部顧問室人文領域人才培育國際交流計畫辦公室**

**執行單位：國立臺南藝術大學古物維護所**

**計畫主持人：蔡斐文**

**執行日期：98 年 10 月 1 日至 99 年 2 月 11 日**

**中華民國 99 年 6 月 1 日**

**99 年人文教育革新中綱計畫**

**子計畫三 人文領域人才培育國際交流計畫**

**【補助類型-海外活動類專題研究】**

**【澳洲國家圖書館保存修護部門 實習計畫】**

**期末成果報告**

**指導暨補助單位：教育部**

**指導單位：教育部顧問室人文領域人才培育國際交流計畫辦公室**

**執行單位：國立臺南藝術大學古物維護所**

**計畫主持人:蔡斐文**

**執行日期：98 年 10 月 1 日至 99 年 2 月 11 日**

**中華民國 99 年 6 月 1 日**

# 目錄

一. 計畫名稱.....	4
二. 計畫目標.....	4
三. 執行情形.....	6
四. 經費運用.....	8
五. 執行成果分析與檢討.....	8
六. 結論與建議.....	13
七. 檢附資料.....	14
1. 澳洲國家圖書館保存修護部門相關資料.....	15
2. 工作日誌.....	32
3. 修護報告.....	40
3.1 澳洲國家圖書館檢視登錄與修護記錄表.....	41
3.2 預防性維護記錄表.....	57
3.3 澳洲國家美術館修護記錄表.....	60
4. 澳洲國家修護單位相關資料.....	65

## 一. 計畫名稱

### 澳洲國家圖書館保存修護部門實習計畫

## 二. 計畫目標

臺灣地區的圖書館近年來逐漸受到民間之重視，民眾與研究人員使用圖書資、文獻資料等資源頻率增高，臺灣的博物館也紛紛舉辦與臺灣本土議題相關的展覽，展示物件不乏書籍、史料之使用，因此越多的人注意到這些珍貴史料之脆弱程度，為延長文物的研究壽命，紛紛進行文物整飭與數位化典藏。

澳洲國家圖書館創立始於西元 1901 年，其前身為澳洲聯邦國會圖書館，西元 1927 年澳洲聯邦國會圖書館隨著澳洲國會從 Melbourne 遷移至 Canberra，並於 1960 年正式自澳洲國會圖書館獨立為澳洲國家圖書館<sup>1</sup>〔NLA〕，屬於年輕的國家級圖書館，扮演澳洲文件資產收藏、維護與管理的重要角色。其館藏種類除書籍、期刊外，有大量的手稿、地圖、表演藝術資料、口述歷史與民族誌史料、平面藝術品、亞洲相關藏品、數位藏品、學術論文等資料。行政組織架構則劃分為藏品管理、澳洲藏品與讀者服務、資源分享、資訊科技、團體服務、出版與推廣等六大部門，與臺灣國內博物館、圖書館類型相仿，而保存修護部則隸屬於藏品管理部門之下。

因應世界潮流，館方致力於藏品維護並將其數位化，建置相關數位化資料庫，在藏品維護與因應圖書館展覽等強化資源可利用性上積極規畫以及執行。而保存修護實驗室亦與當地學術機構相互合作進行教學和研究，實驗室於 2009 年 9 月重新整修完畢，澳洲國家圖書館之組織架構請參考圖 1。

---

<sup>1</sup> National Library of Australia <http://www.nla.gov.au/>

# National Library of Australia

## Organisation Chart

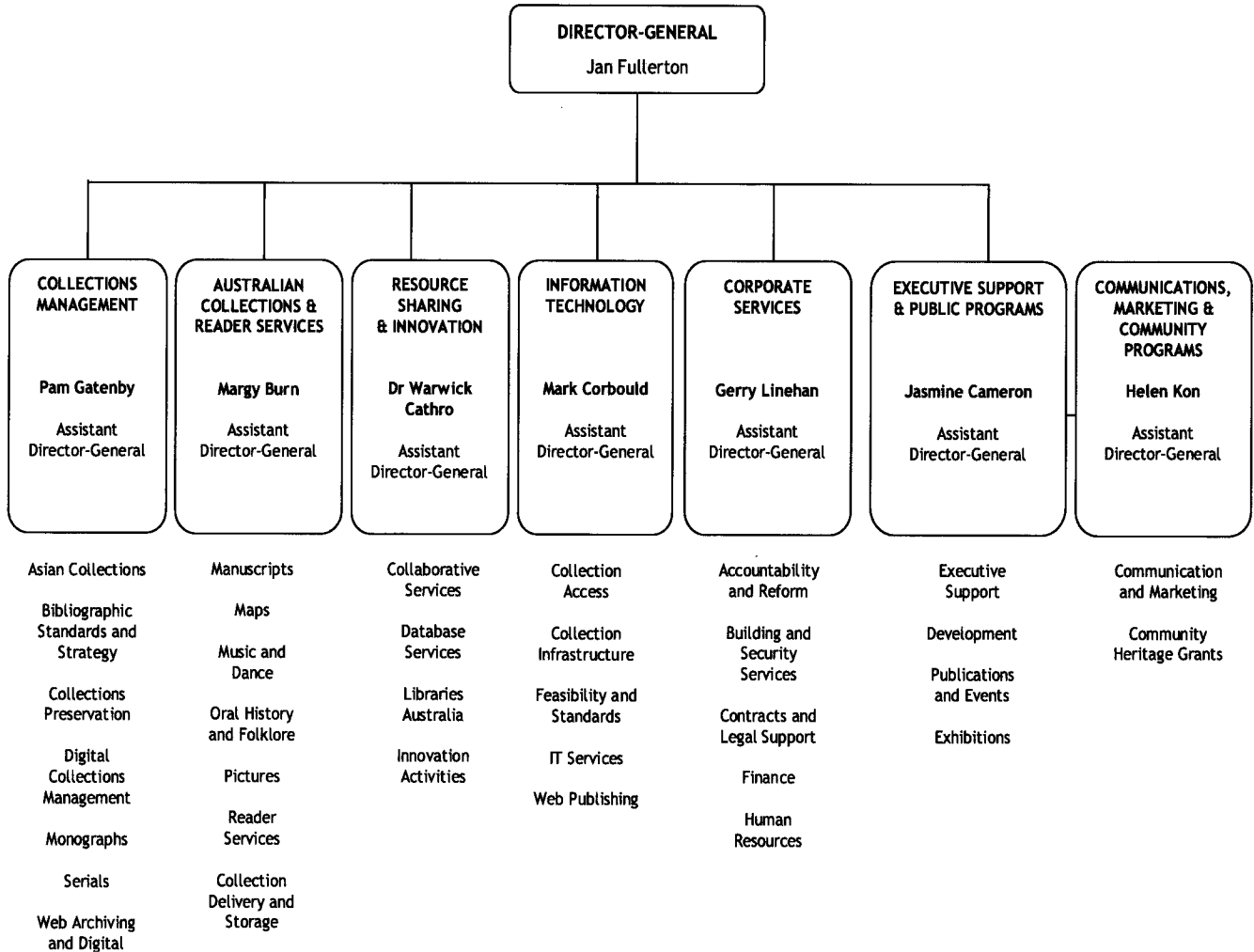


圖 1 澳洲國家圖書館之組織架構圖

國立臺南藝術大學古物維護研究所四年級研究生汪欣樺在完成國內博物館如臺灣國家美術館、臺灣歷史博物館、高雄市立美術館等修護單位短期實習後，通過申請，至澳洲國家圖書館進行為期四個月短期專業實習，欲以保存維護的角度與國外資深修護師共同工作，進行觀察、學習與交流。比較國內外圖書館、博物館等單位對於文物應用需求與維護的異同。對於修護經驗的累積與專業學習是非常好的機會，也期望藉此機會提供國內相關領域圖書館、博物館等專業人員對於紙質類藏品的保存修護可參考的相關訊息以及心得。

### 三. 執行情形

此實習計畫於 2009 年 10 月至 2010 年 2 月澳洲國家圖書館進行。期間實習工作主要針對所屬保存維護實驗室處理之藏品進行保存修護研究。以下列分項為工作執行重點：

#### 1. 專業實習與記錄

此次實習以紙質修護相關業務為主軸，實習期間參與團隊修護專案 1 件、資深修護師指導進行修護專題討論與實作共 17 件，共計執行修護作品 18 件。修護研究討論包含檢視登錄、文物劣化狀況及處理原則，並針對文物使用需求擬定修護建議與步驟、詳實記錄相關訊息<sup>2</sup>、機動支援其他修護案的臨時狀況。在實習期滿時完成館方修護報告與記錄，提供實習單位存查參考。除主要修護工作外，認識澳洲國家圖書館的典藏機制、庫房設置、文物修護流程、工作範圍等，參與保存修護部門人員工作及瞭解其在澳洲修護單位中所扮演的角色與修護方向，圖 2 為此次實習所接觸之相關部門。

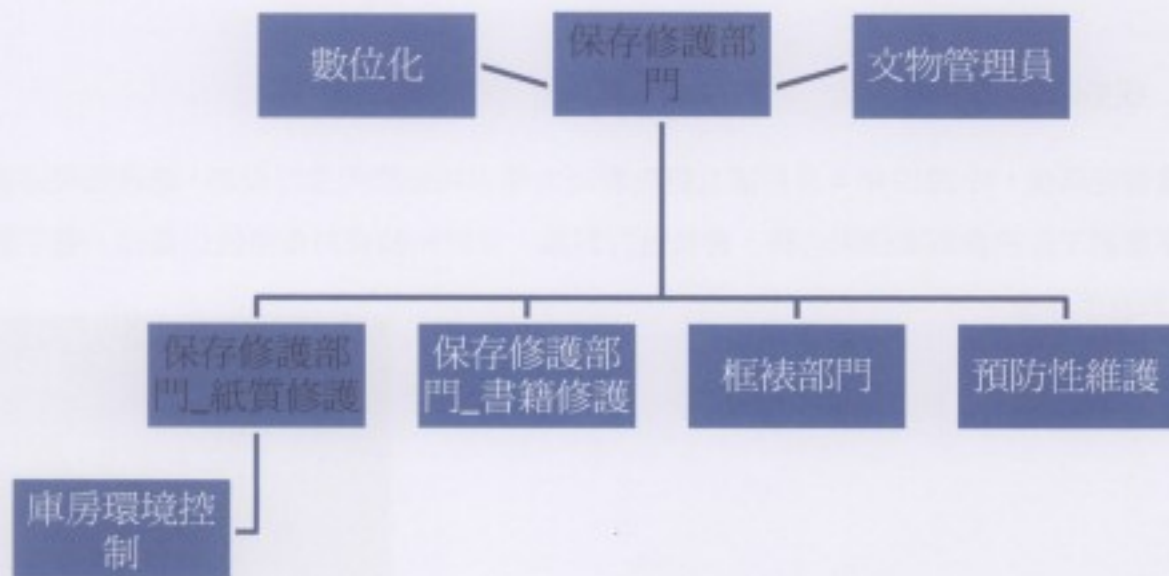


圖 2 實習生於 NLA 實習期間所接觸的相關部門。

<sup>2</sup> 工作記錄含實習日誌及修護記錄，皆檢附於後。

## 2. 參訪相關單位與交流

與實習指導人討論後，連繫澳洲當地博物館、美術館等國家保存修護單位進行參訪。參訪單位有澳洲國家美術館〔National Gallery of Australia〕<sup>3</sup>、澳洲國家博物館〔National Museum of Australia〕<sup>4</sup>、國家檔案管理局〔National Archives of Australia〕<sup>5</sup>、澳洲戰爭紀念館〔Australian War Memorial〕<sup>6</sup>與新南威爾斯藝廊〔Art Gallery of NSW〕<sup>7</sup>等五個修護單位。透過參訪與相關人員針對國內外文物保護進行討論與交流，加強學習成效，亦使國外相關機構對於臺灣文物維護與保存領域有更進一步的認識。



圖 3 澳洲戰爭紀念館庫房參觀



圖 4 澳洲國家博物館 紙質修護室 左為 NLA 修護師 Lydia 右為 NMA 接待人員紙質修護部門修護師 Jaycee

## 3. 成果分享

實習完畢後，於 2010 年 4 月於國立臺南藝術大學古物維護所進行發表，透過簡報與書面方式分享實習工作的參與案例與心得，會後進行討論。並將相關資料彙整後以書面、電子檔形式送交 教育部存查。



圖 5 實習心得發表與分享

<sup>3</sup> National Gallery of Australia <http://www.nga.gov.au/Home/Default.cfm>  
<sup>4</sup> National Museum of Australia <http://www.nma.gov.au/index.html>  
<sup>5</sup> National Archives of Australia <http://www.naa.gov.au/>  
<sup>6</sup> Australian War Memorial <http://www.awm.gov.au/>  
<sup>7</sup> Art Gallery of New South Wales <http://www.artgallery.nsw.gov.au/>

## 五. 執行成果分析與檢討

以執行重點作為成果分析與檢討的討論要項：

### 1. 專業實習

實習之前，實習生已與實習單位針對實習的內容、實習目標及需求等有密切的溝通。除了實習第一周認識工作環境與伙伴、辦理報到手續外，也討論了實習部門所擬定的實習計畫。此次實習指導老師由 Jennifer Lloyd 與 Sophie Lewincamp 共同負責。Jennifer 主要負責協調學生實習及生活部分；Sophie 則負責修護研究專業指導、安排實習主題與協調學習進度。另外修護部門也會根據修護師之專長協同實習生進行不同的修護案。除了實習生與不同資深修護師討論修護案外，藉著此次實習機會，實習生也曾與澳洲修護系所畢業的年輕修護師交流修護技法與經驗。澳洲典藏之文物，譬如國內少見的羊皮文物、平版海報、相片等，與臺灣文物稍有不同，因此實習生可藉此次機會生增廣見聞並拓展學習經驗。就臺灣的學習環境而言，國內修護課程十分完整，除了學術討論和實驗外，學生們亦參與專業修護案，因此在修護專業之認知、方法、與器材操作並不亞於國外修護系所的研究生；此外，國內實習生因有多元且豐富的實作經驗，所以可以快速的進入狀況並提供專案團隊的想法與回饋。

因實習單位不是很明確的了解實習生先備經驗，第一件修護案況狀較單純。於是實習第三個禮拜，實習生向澳洲國家圖書館修護部門簡報國內研究所課程的學習與專案經驗，藉此機會讓實習指導老師與修護師有所認識後，再討論並調整下個月份的實習工作內容；如此一來，修護主題做了調整，以文物多樣性且不同的需求之修護為主題。實習內容除一般修護外，還協助澳洲國家圖書館的數位化工作，如辨識亞洲書籍的排序及認識，並藉此瞭解館藏數位化的流程以及數位化相關部門。與國內數位化典藏的博物館相仿，數位化典藏以澳洲國家圖書館與委外數位化廠商合作進行，修護部門協助文物的維護以方便數位化的工作。數位化資料分為三種，一是永久典藏，此份檔案資料解析度高，不外借僅供典藏；第二種則是供圖書館存用的檔案〔如拷貝複製成第三種檔案〕；第三種則是對外提供借用與複製。由於數位化典藏的修護工作瑣碎且數量龐大，因此此類工作多半以零碎時間為主。比較國內數位典藏設備，澳洲國家圖書館備



有特殊為大型平面作品設計的攝影平臺以及相片軟片等設備，似乎更為齊全的。此外國外修護部門非常注重公共安全，包括軟片複製的抽氣設備、工作時受傷的通報流程一點都不馬虎，且認真的規劃與執行。

國家圖書館修護部門亦致力於修護觀念的教育推廣工作。參觀與解說工作由修護部門的人事主管 Jennifer 進行安排與執行。平日進行所有修護工作以及相關會議 Jennifer 均參與會議，修護案過程也會隨時詢問狀況並瞭解其修護狀況，以即時掌握每件修護案的流程及特殊性。對參觀民眾可透過申請參觀修護室，這些團體包括了學校學生、藏品捐贈者與一般民眾。此外民眾可進一步的擔任志工，此文物維護與修護的觀念推廣以及教育較國內普遍。

實習工作內容多元，學習管道開放，因此提升了實習生學習興趣與動機。實習生規定參加例行的會議，以瞭解各組的短、長期工作重點；除了主要工作重點外，典藏部門參與之工作內容包括了突發蟲害臨時狀況、數位化環境檢視、外庫房環境檢測、預防性維護部門參與展品評估、借展文物檢視與處理、框裱部門協助與特殊維護措施與執行等。此次實習以文物修護工作為主要內容，因此與保護相關工作僅能短暫或重點式的認識，無法未深入了解是此次實習唯一美中不足之處。

修護部門除了資深修護師、常駐修護師、兼職修護人員外，包括了相關領域的工讀生、志工，在工作休息之溝通更可窺見澳洲生活各面向。像年長志工對文物常有不同角度的看法及認識，都可讓修護師面對文物之時有更廣泛的瞭解；此外，修護部門藏有頗具規模的修護相關期刊、資料與書籍，因此澳洲大學相關科系學生於特定時間會到修護部門進行資料分析與研究，面對在學學生、甫畢業的修護師，也多了生活與專業交流的機會。

面對不同國情文化，自汲汲忙碌的亞洲到自然野趣帶著濃厚歐洲風情的澳洲實習，實習生面對舒緩的工作步調仍調適了好一陣子；工作習慣調適包括—「完成一件事情」與「避免的長時間的同樣工作」之態度。實習生習慣將工作的某一流程完整完成，而館方修護師覺得長時間重複相同工作無法專注且效率降低。實習指導者試圖給予其他工作，以分散實習生專注完成的壓力。但實習生卻因面對接踵而來的工作，覺得自己無法一一完成感到慌張。而實習生緊湊的工作習慣，也易使館內修護師感到匆促，此工作步調磨合了一段時間。在國家圖書館實習，除修護部門的專業藏書外，實習生身分可擁有與工作人員的圖書借閱的福利，實習部門亦慷慨的允許實習生使用複製資源。惟實習時間過短，工作時間較長，實習生未妥善規劃運用其圖書館資源實屬可惜。期望實習生在未來若有同樣情況，可以加強資料蒐集與使用，相信對於可以獲得更多的學習效益及樂趣。

## 2. 參訪相關單位與交流

就參觀 Canberra 其他國家相關修護部門而言，由實習生也與指導老師討論參觀單位，在實習指導部門例行會議中由修護師群討論、分配相關工作，如個別聯繫參訪單位、安排時間以及陪同參觀的人員等。NLA 修護部門的資深修護師多經歷過不同修護單位，因此各自負責實習生不同單位安排。修護單位依照博物館發展方向訂定修護政策，如 NLA 著重於資料的「使用」，使圖書館的資料可以廣泛、有效率的使用變成爲修護時考量的重點。

國外文物管理員及修護師的制度十分的健全，圖書館的文物管理員負責向修護師說明文物使用的方式及需求，由修護師向文物管理員說明修護的考量以及使用時注意事項。在澳洲國家博物館（簡稱 NMA）修護部門之區分更顯而易見。NMA 修護部門位在 Canberra 的市郊 Mitchell，粗分爲紙質、木質、織品、塑膠、金屬部門，除保護工作外，也從事鑑定、劣化控制相關研究。其藏品爲澳洲常民收藏，記錄澳洲生活，館藏類型與目前正在籌備的臺灣歷史博物館相仿。NMA 比較特殊的地方在於修護師會盡量使文物可以運轉與使用的狀態，如修繕古鐘，除了文物本身的外型完整度的修護外，還考量維護保養其文物的可用性。

NMA 修護部門由科技部保存科學家和各領域的專業修護師所組成。與其他修護單位一般，負責全面性包括庫房以及展場的環境控制、藏品緊急處理、生物性損害處理。然而各館之文物保護維護部門若遇到有關化學及環境有關無法解決的緊急狀況，則可向澳洲的 The Commonwealth Scientific and Industrial Research Organization（簡稱 CSIRO）申請付費協助。



圖 6 NMA 位在 Canberra 市郊 Mitchell 之修護部門

澳洲國家檔案局（簡稱 NAA）中文物多爲書籍、紙張、相片、影音軟片、數位檔案等資料。其修護部門（Preservation and disaster recovery enquires）亦與展覽館分設兩處，修護部門位於 Canberra 郊區，除了負責澳洲所有檔案修護保存外，還負責檢測市售檔案用材料，替檔案材料把關。



圖 7 位於市郊的 NAA



圖 8 通過檢測的檔案用材即可標註 NAA 專屬浮水印

此次實習也參訪了澳洲戰爭紀念館（簡稱 AWM）的修護部門— Treloar Conservation Centre，成立於西元 1974 年，為澳洲最早成立的國家修護機構，內分紙質（目前正職紙質修護師有四人）、書籍、檔案、勳章、油畫、照片、織品等部門，提供藏品災害諮詢。除此，戰爭紀念館因其獨特性，由設置大型藏品的維修中心，如戰機、戰車或與戰爭相關的槍砲彈藥，因此庫房的設置更是標準嚴格。



圖 9 AWM Treloar Conservation Centre 中大型藏品維護中心

因為槍砲彈藥以及交通工具的特殊性，因此此類文物的修護人員多半是由相關領域的專才擔任，並與保存科學家相互合作，進行文物的維護。另有較多的大型機具的升吊輔助工具。

在參訪安排中，實習單位協助洽談了移地實習。讓實習生有至澳洲國家美術館一個星期的實習機會。實習開始前，先參訪過美術館修護單位。藉此對該單位有所認識，並瞭解實習期間紙質修護部門的業務計畫及主要實習項目。因實習時間僅為一個禮拜，因此除修護工作外，亦規畫於實習期間協助修護師進行平日工作如展場藏品維護與檢視等，藉以瞭解美術館修護師實際工作內容。國家圖書館修護部門負責人

Sophie 在求學階段曾於美國國會圖書館進行實習，對於修護實習有周詳的規畫及完整的瞭解。妥善運用修護單位資源，引導實習生認識澳洲修護單位的關係與發展、參與不同面向的實際工作、引見許多資深修護師。圖書館著重於提供大量的資訊傳播與維護，而博物館、美術館則偏向研究分析文物的歷史資訊。各個單位取向明確，完整的文物管理員與修護師制度讓館藏單位

有更完善的典藏環境。澳洲許多國家收藏單位皆位於首都 Canberra，展覽館也因都市規畫時集中於同一區塊，然因場地有限，許多修護部門與展覽館主體分開而立。由於各館收藏文物的類別方向不盡相同，澳洲並未成立修護中心，但是每個修護單位仍緊密聯繫，如圖書館文物需要進一步的分析與鑑定時，便與國家美術館或博物館修護部門合作相互支援。各館的修護師都熱心地介紹其工作環境與模式，讓實習生更清楚知道 Canberra 的文化資產修護機制，使實習計畫內容更加豐富。

國家美術館的修護部門工作方向較偏向學校的教學，因有帶實習生的經驗，可以非常快速的引領實習生進行特定的練習和實習工作。除修護專業外，在討論部分，實習生運用在學期間的學習交流。讓外國修護師對於國內的修護教育課程有更詳細的認識，而國外的專業修護師對於南藝古物所的課程完整度、設備與資訊的更新及實作能力的養成訓練更是讚譽有加。國家美術館的實習指導由 Kemp Fiona 擔任，並與另外兩位修護師 Pose、James 共同協助指導。三位資深修護師熱心的協助實習生，並協助安排位在雪梨新南威爾斯國家藝廊修護部門的參觀。



圖 10 新南威爾斯國家藝廊油畫修護部門

新南威爾斯國家藝廊修護部門中，將作品的「框裱」視為文物的一部分。因此有部門專門進行框裱修護與研究。國外的文化資產相關單位相當重視「文物修護」這一區塊，因此無論在資金的分配與人員的培訓、教育的推廣等都有非常強有力的支持。而修護部門工作人員可分為行政人員、修護人員與文物管理員，分工明確節省更多的人力資源，更有效率的進行工作。目前國內維護文化資產的

相關學系如雨後春筍般出現，在在表示文物維護這一區塊的專業必要性逐漸為國人所注意。然國內文保觀念有待確實地向下紮根。近年來，臺灣公、私部門雖具有特色文物典藏空間，卻少有文物維護保護單位之設立，這也是國內極需努力與強化的領域，以避免專業修護人員資源之浪費。

### 3. 成果與分享

結束實習後，於國立臺南藝術大學古物維護研究所進行實習報告。報告對象為博物館或修護相關領域者，實習的方向則以澳洲國家圖書館實習工作概略和參觀相關單位進行說明。實習生報告份量適中，時間掌控得宜。惟報告的面向不多，建議宜注意簡報內容安排與呈現形式，以達到更好的交流效果。

## 六. 結論與建議

此行實習生於澳洲國家圖書館進行修護技術的探討，並對國家圖書館修護部門運作與澳洲境內修護單位之合作模式有所認識，確實達成計畫預期目標。此行之交流與溝通也瞭解國內文物維護課程之完整性，理論與實務兼顧，藉著國內、外博物館實習機會，使學習研究與博物館實務緊密相扣。此「人文領域人才培育國際交流計畫」實踐了教育部於 94 年所擬定的具體目標，發揚臺灣特色、教育國際化等。然國內相關領域與國外博物館研究或實習的合作並沒有正式的管道，實習生接洽實習時，簽證之相關辦理遇到許多問題。若有一個長期的合作平台，實習得以延伸其長期效益。建議有關單位研擬中期、長程實習補助發展計畫與交流合作，不但可以帶給國內相關領域的研究者、經營單位專業上的刺激與互動，強化人文學者的全球視野，更能讓國內文物保存修護的辛苦耕耘、研究與進步與世界接軌，藉由專業與文化交流接觸讓外國認識臺灣。

## 七. 檢附資料

澳洲國家圖書館保存修護部門相關資訊

工作日誌

修護記錄表

澳洲國家修護單位相關資料

## 1. 澳洲國家圖書館保存修護部門相關資料

## Private Conservators in the A.C.T.

### Paper

#### **Art & Archival Paper Conservation**

Kim Morris  
28 John Bull St  
Queanbeyan  
P.O. Box 75  
Ainslie, A.C.T. 2602  
Ph: 6297 7670  
Fax: 6299 7858  
Mobile: 041 214 6812

### Books

**Brian Hawke**  
44 Santalum St  
Rivett, A.C.T. 2611  
Ph: 6288 8415

### **Bookarts**

John and Joy Tonkin  
83 Flinders Way  
Griffith, A.C.T. 2603  
Ph: 6295 6786

### Paintings

#### **Canberra Paintings Conservation**

##### **Services**

Kathryn Ferguson  
6 Myall St  
O'Connor, A.C.T. 2602  
Ph: 6248 5441

##### **Herm Art Services**

301 Canberra Ave  
Fyshwick  
Ph: 6280 9622  
Fax 6280 5622

##### **International Conservation Services**

Myra Pastuch  
Ph: 6214 9827  
Mobile 0402 476 693

### Paintings & Objects

#### **(ethnographic materials)**

##### **Anne I'Ons**

5 Provis Pl  
Kambah, A.C.T. 2902  
Ph: 6231 8326 or 6280 9622

### Photographic materials

### Textiles

#### **The Conservation and Restoration Studio**

Carmella Mollica  
40 Hurtle Ave  
Bonython, A.C.T. 2905  
Ph: 6293 1842  
Mobile 0417 066 170

### Endangered Textiles P/L

Victoria Gill  
Shop 4 Duffy Place  
Duffy ACT 2611  
Ph: 02 6287 1291  
Mobile 0414 815 436

### Objects

#### **Conservation Works P/L**

Gillian Mitchell  
Murrumbateman Ph:6226 8339  
U23/105 Newcastle Fyshwick 6280 7007  
Mobile: 0413 861 450  
E-mail: [sajenkin@ozmail.com.au](mailto:sajenkin@ozmail.com.au)

### **Lincoln Garth Studio**

John Ashton  
16 Magrath Crescent  
SPENCE 2615  
Ph / fax: 6258 1104  
Mobile: 0417 429 843



## **CARE AND HANDLING OF LIBRARY MATERIALS**

All items are part of the collection and should be treated with equal care and respect.

If you have any questions or concerns ask Preservation Services for advice or help. Call the Book Repair Lab on x1385

### **General handling of collection material**

- Always have clean hands. You might need to wash off the natural salts and oils that form on your hands every hour or so to prevent staining of collection material.
- Use cotton or latex gloves, especially for textiles or photographs.
- Have plenty of work space so material can lie flat and fully supported, without overhanging the edge of your desk.
- Try to keep stacks or piles of material to a minimum. Stack smaller items on top of larger ones.

### **Handling books**

- Use acid free paper strips as markers
- Use a book support and book snake to hold open the pages.
- Use an index card to turn the pages or turn from the top right. Never use wet finger tips.
- If bindings are tight, damaged dirty or have uncut pages seek help from Preservation Services.
- Paper from the late 19<sup>th</sup> and early 20<sup>th</sup> century will usually be of poor quality and may be brittle and deteriorated. It needs particularly careful handling.

### **How to remove books from the shelf**

- Push adjacent books in slightly to expose the selected book.
- Grasp the book around the middle of the spine and hold firmly to lift.
- Never pull the book from the top of the spine as it is very weak there.
- Straighten up the shelf and adjust bookends as necessary.

### **Moving material**

- Use a trolley if you have to move more items than can be held in one hand.
- Take care not to overload flat trolleys or book trolleys.

### **Hazards to avoid**

- Post it notes leave behind a sticky residue and can become stuck in place.
- Staples and paperclips may rust and eat through the paper.
- Rubber bands go sticky and become embedded in the paper. In the short term they will damage the edges of pages.
- Food and drink can attract insects and rodents. Spills and oils from foods cause staining.
- Biro pens run in many solvents and fade over time.
- Sticky tape and some labels turn brown and eventually fall off leaving a stain.

### **Marking and Labelling**

- Always use pencil whenever possible. Pencil is permanent (it doesn't fade) but can be removed if an error is made.
- Uniball micro delux pens in black are suitable for writing on spine labels and directly on collection material where a non-removable mark is needed. Staedtler Permanent Lumocolour pens in black are also suitable for writing on spine labels.
- The X stampers are the only stamps that should be used on collection material. They can be refilled, but you must use the X stamper brand ink. When applying to glossy paper you will need to give the stamp plenty of time to dry.
- Technique for applying labels:
  1. Write on the label/ print the label
  2. Peel the backing from the label, keeping the label flat.
  3. Pick up the label without touching the adhesive.
  4. Position the label and work it down firmly in place. Using a bone folder can assist in forming a close bond.

### **Useful equipment**

B or HB pencil  
Uniball micro delux pen (black)  
Staedtler Permanent Lumocolor  
X stamper  
Strips of acid free paper  
Book pillows  
Book snakes

### **Sending an item to Preservation Services**

Any damaged material should be sent to Preservation Services. We can also cut the pages and provide advise on the best way to copy an item.

- Fill in a **yellow Request for Treatment form** with as much detail as possible.
- Please fill in all the relevant areas. Attaching the catalogue record is not enough as we have found they get lost.
- If you need the item back after treatment note it on the form. Otherwise it will be returned to stacks.
- Keep the tear-off strip from the bottom as your record.
- Place the damaged item and the yellow form on the **pick-up shelf** or bring it to Preservation Services personally. Material on the shelf is collected every Monday.
- Please don't send collection material in the mail round.

If you have any questions or are not sure, please call the Preservation Book Repair Lab on x 1385.

## Draft Lighting Policy (Summary)

**The following assumes that UV light is to be eliminated to 10 microwatts/lumen. Fluorescent or LED lights should be avoided wherever possible, and will not be used to light sensitive or intermediate materials.**

We will use 5 categories

- |                              |                                           |
|------------------------------|-------------------------------------------|
| 1. Vulnerable/zero tolerance | no exhibition, use facsimilies only       |
| 2. Sensitive                 | 4 mths max at 50 lux, 12.5% of total time |
| 3. Intermediate              | 12 mths max at 50 lux, 20% of total time  |
| 4. Durable                   | 12-24 mths at up to 200 lux               |
| 5. Permanent                 | unlimited display at whatever lux desired |

All collection material will be categorised according to its sensitivity to light, which will normally dictate the length of time it may be displayed.

It must be noted that this system is far from perfect when it comes to the 'sensitive' category. This category averages Blue Wool standards 1 – 3, which is a large range of sensitivities. **The sensitive category (4 months at 50 lux) would seriously overexpose material that is Blue Wool 1.** Blue Wool 1 is most likely to be watercolours in pristine condition, and modern synthetic colourants, such as those used in felt tip and highlighter pen.

Unfortunately, it is not possible to distinguish easily between Blue Wool Standards 1, 2 and 3 without testing. **It is therefore recommended that all potentially Blue Wool 1 items on the Treasures List which are Priority 1 materials be tested for light fastness.** A list of these items based on the list for the first iteration is found in Appendix 2 of this document. A table listing the consequences of Blue Wool classification and length of time allowed to 1 Just Noticeable Fade (JNF) in terms of the interval required between iterations is found in Appendix 3.

Collection managers may permit display at higher lux levels or for longer periods after consultation with Preservation Services regarding the implications or risks of such a decision. Collection managers may also restrict display to shorter periods than outlined in this policy.

Where desired, some objects may be tested for light sensitivity using testing equipment potentially available from the NMA. Exposure decisions may be adjusted on the basis of results of such testing.

Exhibition designers are encouraged to make use of strategies (low light solutions) to limit the amount of light falling on objects. These strategies may include:

- Progressive adaptation of visitor eyes to lower levels of illumination, avoidance of bright spots
- Elimination of glare
- A generally darkened space which will make even dimly illuminated spaces look brighter

- Visitor operated push button illumination of objects
- Motion detecting sensor lights
- Objects displayed in drawers which visitors are encouraged to open
- The use to red filters to eliminate the blue high energy end of the spectrum where the nature of the objects permits

Where low light solutions have been implemented, materials may remain on display for longer than the specified period. Actual illumination received will need to be logged so that actual exposure may be calculated.

## **Appendix 1: Sensitivities of materials**

**The assignment of objects into classifications according to light sensitivities is an imprecise science. However, the following will act as an indication of what the sensitivities are likely to be.**

### **Vulnerable/Zero tolerance**

Historic light sensitive materials in pristine condition, highlighter pen

### **Sensitive**

**(Most natural dyes and lake pigments, most plant and animal colours. We would only expect to find them now if they haven't been displayed. Exceptions are indigo, madder (durable on wool, intermediate on silk, fugitive on cotton) iridescence (structural colour is durable))**

Historic watercolours and watercolours of unknown palette

Pastels of cheap or unknown palettes

Gouaches of cheap or unknown palettes

Historic coloured prints

Coloured dyes

Historic coloured silver gelatin photographs

Coloured illuminations

Coloured historic textiles

Coloured photographs of unknown quality, historic coloured photographs

Polaroids

Felt tip pen drawings?

Tinted papers?

Bistres, sepias ?? (Colby)

Some vellum bound books depending on the condition of the binding (RH sensitive)

Poor quality degraded, discoloured and embrittled papers

Albumen prints

Daguerrotypes, tintypes ?

Unidentified historic photographic processes

Modern digital prints where paper, printer and ink used are unknown

Some iron gall inks

### **Intermediate**

**(All the important red pigments, carmine, madder lake, and alizarin lake ... carmine is fugitive in thin colour, alizarin is durable at full strength ...)**

Modern coloured prints

Modern colour photographs

Vellum bound books depending on the condition of the binding (RH sensitive)

Carbon inks on good quality (but not rag) papers

Some iron gall inks

Silver dye bleach processed prints ? Colby

"Principal brilliant reds carmine, madder lake, alizarin lake" ?Colby

Acrylic paintings ??

**Durable**

(Top quality modern palettes and carbon inks are durable to permanent ...  
paints with durable and permanent pigments will chalk before before they fade  
if UV is present)

Inert pigments (graphite, charcoal, earth colours) on strong, good quality rag papers

Sepia, bistre??

Oil paintings

Black and white silver gelatine prints on good quality paper

Some iron gall inks

Carbon based inks

Some modern digital prints of known composition (paper, printer and inks)

**Permanent**

Stone, glass, pottery, ceramics, enamel, metals

wood and bone where surface colour is not important

**Appendix 2: Implications of various intervals to 1 Just Noticeable Fade**

<b>Blue Wool rating</b>	<b>50 years to 1 JNF Years between 16 week iterations</b>	<b>100 years to 1 JNF Years between 16 week iterations</b>	<b>200 years to 1 JNF Years between 16 week iterations</b>	<b>300 years to 1 JNF Years between 16 week iterations</b>
<b>1</b>	7.9	15.9	31.7	47.6
<b>2</b>	2.4	4.8	9.5	14.3
<b>3</b>	0.8	1.6	3.2	4.8

<b>Blue Wool rating</b>	<b>50 years to 1 JNF Years between 12 week iterations</b>	<b>100 years to 1 JNF Years between 12 week iterations</b>	<b>200 years to 1 JNF Years between 12 week iterations</b>	<b>300 years to 1 JNF Years between 12 week iterations</b>
<b>1</b>	6.0	11.9	23.8	35.7
<b>2</b>	1.8	3.6	7.1	10.7
<b>3</b>	0.6	1.2	2.4	3.6



### **Appendix 3: Suggested objects for microfade testing for 1<sup>st</sup> iteration Treasures**

**Joseph Lycett – Drawings of the natives and scenery of Van Diemen's Land**  
(Lycett Album) – Pictures - PIC R5673-R5692 – Bib ID 1586033

**Jan – Janssen - Donker Atlas – Maps - Map RA 10 – Bib ID 2124860**

**John Hunter - Hunter Sketchbook – Australian collections - PIC T1163 NK2039/7**  
– Bib ID 2617744

**John William Lewin – Birds of New Holland - Australian Collections- Gmmef**  
598.2994 LEW - Bib ID 373575

**George Raper – Laughing Kookaburra - Ducie collection – Pictures - PIC/9838/4**  
It is suggested that 2<sup>nd</sup> and 3<sup>rd</sup> iteration items be tested as well.

**Latin Book of Hours – Manuscripts – Clifford Collection of Manuscripts – MS**  
1097

National Library of Australia

Recommended Practices for

# Digital Preservation



[www.nla.gov.au/preserve/digipres/digiprespractices.html](http://www.nla.gov.au/preserve/digipres/digiprespractices.html)

## RECOMMENDED PRACTICES FOR DIGITAL PRESERVATION

The National Library of Australia has been researching issues and undertaking activities relating to digital preservation for a number of years. This brochure provides advice for those with a long-term responsibility for management and preservation of digital materials.

More specific guidance may be found through the National Library's PADI (Preserving Access to Digital Information) subject gateway: [www.nla.gov.au/padi/](http://www.nla.gov.au/padi/)

### THE NEED FOR DIGITAL PRESERVATION

Continued access to digital materials requires the maintenance of intact data streams and the means to read and interpret them. Digital storage media are vulnerable to damage or deterioration, and hardware and software become obsolete, so the time-frame for making preservation decisions is short compared to paper-based materials. Action needs to be taken early and to be sustained for as long as the materials are needed.

To preserve digital materials the key needs are:

- to protect the integrity of the data streams, and
- to maintain a way of displaying and using the materials that retains their authenticity.

Related needs are:

- to record enough metadata to manage preservation, show provenance and help users understand the materials
- to manage associated rights issues
- to monitor technology for changes that could lead to loss of access.

### SETTING UP PRESERVATION PROGRAMS

Managing the preservation of digital materials may be complex, but not all the issues need to be addressed before starting. Even modest programs can buy time against the loss of digital materials.

Consider these points in developing your program:

#### **UNDERSTAND YOUR SITUATION**

Before beginning, it is important to understand your responsibilities and to design a program to fit your situation. Consider your program in the context of your broader policies or responsibilities regarding collection, preservation, public accountability and access to materials.

#### **STATE YOUR OBJECTIVES**

- Define what you are willing or obliged to preserve, for whom you are preserving it, and for how long. Develop a policy clearly stating the scope of your preservation responsibilities and intentions.
- Develop criteria for selecting materials to be preserved in line with your policy.
- Understand how the materials are created and how they may be used. This will help in determining the level of preservation needed and the information required to understand the materials in the future.
- Consider whether you need to preserve full functionality, or whether materials can be presented in alternative ways without unacceptable loss of authenticity.

### **KNOW YOUR COLLECTION**

- Identify what you have, and its technical characteristics, through collection documentation, surveys or use.
- Determine priorities, including pressing risks such as aging or vulnerable media, and software and file formats which are becoming obsolete.
- Use a metadata scheme suited to your objectives to record the characteristics, support requirements, history and context of the material. (Refer to the PADI website for a range of information on metadata guidelines: [www.nla.gov.au/padi/topics/30.html](http://www.nla.gov.au/padi/topics/30.html))

### **PROTECT THE DATA STREAMS**

- Negotiate with rights holders for permission to copy and undertake preservation.
- Securely store physical carriers such as disks in dust-free and relatively stable environmental conditions, and avoid poor handling. Back up the data as soon as possible, especially from magnetic media such as floppy disks.
- Copy the material to a reliable digital storage system with regular backups and disaster recovery measures if available.
- Assign persistent identifiers to the material to ensure it can be found. (Refer to the PADI website for more information on persistent identifiers: [www.nla.gov.au/padi/topics/36.html](http://www.nla.gov.au/padi/topics/36.html))
- Manage ongoing data protection in accordance with good IT practices, including adequate data security and backups, error checking and regular copying to fresh media.

### **MAINTAIN ACCESSIBILITY**

The key challenge is the future use of materials when technological changes make original formats and operating environments obsolete.

Long-term solutions are still being developed and may include migrating data to new formats, creating software tools to present original data, and emulating original operating environments to run original software.

### **INITIAL STEPS THAT CAN BE TAKEN IN THE MEANTIME ARE:**

- to retain the hardware and software required to access the materials in the collection. This is only a short-term solution, as hardware will be impossible to maintain indefinitely.
- If possible, work with creators to produce materials in open, well-supported standard formats for which software access tools may remain available for an extended period.
- It may be possible to limit the range of preservation formats to be managed, either by acquisition choices or by transforming materials to standard formats. If transforming, retain the original data in case the chosen migration path becomes unsustainable.
- Monitor the technological environment for signs that equipment, formats and standards are becoming obsolete.
- Work with or seek guidance from other institutions in developing solutions.
- Consider producing prints or other non-digital representations of the material if other choices are not available, although this may limit its usability or value.
- Retain and manage the original data. Even if there is currently no available solution, future methods, tools or other resources may be able to restore access.
- Assess your ability to care for the materials over the required period. If necessary, develop a succession plan for transferring custody.

[www.nla.gov.au/preserve/digipres/digiprespractices.html](http://www.nla.gov.au/preserve/digipres/digiprespractices.html)

The National Library provides information about digital preservation, including links to management guidelines and a range of specific topics, through the PADI (Preserving Access to Digital Information) subject gateway: [www.nla.gov.au/padi/](http://www.nla.gov.au/padi/)

*First Steps in Preserving Digital Publications*, an introductory guide to preserving disk-based publications is available at: [www.nla.gov.au/pres/epupam.html](http://www.nla.gov.au/pres/epupam.html)

**Information about the National Library's own activities in digital preservation is available from the National Library's website:**

- PANDORA—Australia's Web Archive: <http://pandora.nla.gov.au/>
- Digital archiving: [www.nla.gov.au/initiatives/digarch.html](http://www.nla.gov.au/initiatives/digarch.html)
- Digital preservation: [www.nla.gov.au/preserve/digipres/](http://www.nla.gov.au/preserve/digipres/)

**Or contact**

Digital Preservation, National Library of Australia,  
Canberra ACT 2600. Australia. Email: [digitalpres@nla.gov.au](mailto:digitalpres@nla.gov.au)



## PRESERVATION MATERIALS

It is not always easy to buy small amounts of stable and long lasting materials. The following organisations can supply adhesives, polyester film, acid-free papers and other suitable materials. All will supply a catalogue on request. Check the Yellow Pages under 'Art Restoration & Conservation' or 'Antiques-Reproductions & Art Restorations' for private conservators.

### Zetta Florence Pty Ltd

187 Gertrude Street  
FITZROY VIC 3065  
Tel. 03 9416 2236  
1300 555 124  
[www.zettaflorence.com.au](http://www.zettaflorence.com.au)

### Conservation Resources (International) (Aust.)

PO Box 210  
ENMORE NSW 2042  
Tel. 1300 132 570  
Fax. 1300 132 571  
[www.conservationresources.com.au](http://www.conservationresources.com.au)

### Albox Australia Pty Ltd

56 North Terrace  
KENT TOWN SA 5067  
Tel. 08 8362 4811  
1300 555 717  
Fax. 08 8362 4066  
[www.albox.com.au](http://www.albox.com.au)

## ALKALINE PAPER

Information on Australian-made alkaline paper and board can be obtained from:

Assistant Director of Preservation  
National Archives of Australia  
Tel. 02 6212 3461



## OTHER CONTACTS

Australian Institute for the Conservation  
of Cultural Material (AICCM)  
GPO Box 1638  
CANBERRA CITY ACT 2601  
[www.aiccm.org.au](http://www.aiccm.org.au)

### National Library of Australia

There are two web sites that may assist  
in locating services and providing advice:  
**Professional Conservation Services in Australia**  
[www.nla.gov.au/chg/conserv.html](http://www.nla.gov.au/chg/conserv.html)  
**Preservation Services Branch**  
[www.nla.gov.au/preserve](http://www.nla.gov.au/preserve)  
Tel. (02) 6262 1278

Most state libraries employ conservators  
who may be able to give preservation advice.

### National Archives of Australia

Offices in all state and territory capital cities, the  
website has advice leaflets on a variety of materials.  
Tel. 02 6212 3600  
[www.naa.gov.au/recordkeeping/preservation/advice/  
preservation.html](http://www.naa.gov.au/recordkeeping/preservation/advice/preservation.html)

COOL (COnservation OnLine)  
[palimpsest.stanford.edu](mailto:palimpsest.stanford.edu)

## FURTHER READING

Many books have been written about the care of paper-based materials. For a straightforward account, see *Caring for Books and Documents* A.D. Baynes-Cope, 2<sup>nd</sup> ed., London: British Library, 1989 (ISBN 07123 04518). Another useful book is *Preserving Archives and Manuscripts* by Mary Lynn Ritzenthaler, Society of American Archivists, Chicago, 1993. (ISBN 0-931828-94-5)

## Caring for Your COLLECTIONS



## PAPER AND BOOKS



## CARING FOR YOUR COLLECTIONS

Many Australians own books and paper-based documents such as letters, diaries and photographs which, in addition to being of personal interest, may be historically significant and well worth preserving. If you don't look after them, they may deteriorate rapidly. This leaflet will help you preserve your books and documents by explaining:

- ✓ how to store them
- ✓ how to handle and display them
- ✓ how to preserve them

The solutions are largely a combination of common sense and good housekeeping practices.

Occasionally you may need professional advice from an expert. Some useful contact points and web sites are listed at the end of this brochure.

## HOW TO STORE YOUR COLLECTIONS

The place where you store your documents and books should:

- ✓ be clean and dry
- ✓ be free from animal pests and insects, such as silverfish
- ✓ be a moderate and stable temperature
- ✓ have moderate and stable humidity levels
- ✓ have low light levels
- ✓ be out of direct sunlight

Avoid storage areas such as roof spaces, under houses, the tin shed at the bottom of the yard or the book shelves in the lounge room next to the fireplace. Avoid extremes of temperature and humidity. High temperatures make paper brittle. High humidity causes mould and low humidity can lead to brittleness.

Store your documents and books in materials that will not damage them. Many types of paper, cardboard and plastic contain substances that can harm your collections. These materials can be used as outer containers, but first place your documents in good quality wrapping such as alkaline tissue, stable plastic or 'permanent' paper. Some specialised stationery shops and library suppliers stock these and other preservation storage materials.

## HOW TO HANDLE AND DISPLAY YOUR DOCUMENTS

Most documents can be used or displayed safely, provided you take a few precautions. If possible place each sheet flat and unfolded in a transparent plastic sleeve. This protects it during handling, yet allows ready access to the information.

Good plastics to use include polyester, polyethylene and polypropylene; these are often marked as 'Copy Safe'. Plastics used for food storage are often made of these materials. Oven bags are particularly appropriate as they are transparent and are made out of polyester, which is very stable. Lamination is not recommended.

When framing materials for display, some picture framers can provide acid-free materials and mountboards. Never place items directly in contact with the glass. To slow fading, do not display paper-based documents in direct sunlight. Ultraviolet absorbing acrylic sheeting is preferable to glass as a deterrent to fading.

Photograph albums are a good way of storing or displaying small items. However, avoid the type known as 'magnetic' or self-adhesive as these may stain and damage your documents. A suitable type of photograph album has plastic sheets welded to paper, producing horizontal pockets. It is possible to make your own album, using acid-free paper and mounting corners.

Handle books carefully if bindings are fragile, boxing provides good protection.

## HOW TO PRESERVE YOUR DOCUMENTS

Paper, despite its apparent fragility, can be very durable and paper documents have survived for many centuries. If the paper in your collection is over a century old, its quality is probably high. If it has been carefully stored, it should still be quite strong. Some modern papers, such as newspaper, contain impurities that will eventually destroy them. There is currently no treatment to prevent this happening and material should be copied to preserve it. Fragile items or material on poor quality paper can be photocopied onto permanent paper. Black and white photography and microfilming processes also provide a long lasting record and ensure the retention of the information contained in the documents. Hard copy printouts of scanned material can also be made using permanent paper.

## WHAT NOT TO DO

Attempting to mend paper using unsuitable materials can cause a lot of damage. 'Sticky tape' is the worst offender. It can cause permanent staining and may drop off, leaving a sticky residue, or it may become permanently affixed and develop unsightly discoloration.

Rather than using inappropriate repair materials, it is much safer to store documents in good quality paper or plastic. Do not use metal pins, staples or paper clips. Do not write unnecessarily on any item; if you need to do so, use a soft pencil. Folded items may be carefully unfolded and should then be placed in good quality materials.

## CHECKLIST FOR ACTION

### STORAGE

- ✓ Regularly inspect storage areas to prevent insect or animal infestation. If necessary, use 'pest strips' to control insects, but do not let them touch your documents.
- ✓ Keep storage room clean. Vacuum regularly.
- ✓ Wrap or box documents in alkaline materials.
- ✓ Avoid extremes of temperature.
- ✓ Avoid extremes of humidity.
- ✓ Avoid exposure to direct sunlight.

### HANDLING AND DISPLAY

- ✓ Handle objects with clean, dry hands.
- ✓ Make copies of very fragile materials.
- ✓ Handle or display original documents in protective mounts and folders.

### PRESERVATION

- ✓ Do not mend objects.
- ✓ If it is necessary to annotate documents, use only a soft pencil.
- ✓ Do not use metal pins, staples, paper clips or sticky tape.

## 2. 工作日誌



# The Report of the National Library of Australia

Date: 05/10/2009-31/10/2009

Date	Program
10/6	<ol style="list-style-type: none"> <li>1. Visit to the storage of the library, conservation lab.</li> <li>2. Rare map(RM2075)—documentation, dry cleaning</li> </ol>
10/7	<ol style="list-style-type: none"> <li>1. VOC chart treatment discussion.</li> <li>2. Rare map(RM2075) treatment—tape removal</li> <li>3. Visit to the Asia collection</li> </ol>
10/8	<ol style="list-style-type: none"> <li>1. Rare map(RM2075) treatment—tape removal</li> <li>2. Photo dry clean(Albumen prints)</li> </ol>
10/9	<ol style="list-style-type: none"> <li>1. Rare map(RM2075) treatment—part flatten, arrange the fibers of folds</li> <li>2. Photo dry clean(Albumen prints)</li> </ol>
10/12	<ol style="list-style-type: none"> <li>1. VOC chart treatment—take off the carry layer and the adhesive layer of tapes</li> <li>2. Rare map(RM2075) treatment—mending the tears and supporting creases</li> </ol>
10/13	<ol style="list-style-type: none"> <li>1. Staff meeting</li> <li>2. Rare map(RM2075) treatment—mending the tears and supporting creases</li> <li>3. VOC chart treatment—take off the adhesive layer of tapes</li> </ol>
10/14	<ol style="list-style-type: none"> <li>1. VOC chart treatment—flatten by chamber and Gore-tex</li> <li>2. Rare map(RM2075) treatment—finish mending the tears and supporting creases</li> </ol>
10/15	<ol style="list-style-type: none"> <li>1. Rare map(RM2075) treatment—flatten by humidifying and press</li> <li>2. Mylar protect—Japanese painting</li> <li>3. Photo dry clean(Albumen prints)</li> </ol>
10/16	<ol style="list-style-type: none"> <li>1. Photo(Albumen prints) dry clean—finished</li> <li>2. Mold removal treatment—2 (Band News)— mold removal, surface clean, documentation</li> </ol>
10/19	<ol style="list-style-type: none"> <li>1. Heat-set tissue repair— music magazines ( one is finished )</li> </ol>
10/20	<ol style="list-style-type: none"> <li>1. Heat-set tissue repair— music magazines ( one is finished )</li> <li>2. Binding—2 rebinding ways—Complete 6 books rebinding.</li> </ol>
10/21	<ol style="list-style-type: none"> <li>1. Heat-set tissue repair— music magazines ( the other one is started )</li> <li>2. VOC chart treatment— prepare the mounting material</li> </ol>
10/22	<ol style="list-style-type: none"> <li>1. 2 Watercolors (PIC12974/16, PIC12974/17) documentation, tape removal, mending.</li> </ol>
10/23	<ol style="list-style-type: none"> <li>1. Adjust the documentation forms.</li> </ol>
10/26	<ol style="list-style-type: none"> <li>1. Rare map(RM2075)— mylar protecting</li> <li>2. Watercolors(PIC12974/16,PIC12974/17)— mylar protecting.</li> <li>3. Chinese books(LMS655)— heat-set tissue repair</li> <li>4. VOC chart— flatten</li> </ol>
10/27	<ol style="list-style-type: none"> <li>1. VOC chart— housing, flatten locally</li> </ol>

	2. Chinese books(LMS655)— heat-set tissue repair
10/28	1. VOC chart— prepare for straining
10/29	1. VOC chart— straining one of the parchment map
10/30	1. Chinese books(LMS655)— heat-set tissue repair (1/4 is finished )

# The Report of the National Library of Australia

Date: 01/11/2009-30/11/2009

Date	Program
11/2	<ol style="list-style-type: none"> <li>1. Chinese books(LMS655)— heat-set tissue repair (2/4)</li> <li>2. VOC chart— straining ( one of parchments is finished )</li> </ol>
11/3	Public Holiday
11/4	<ol style="list-style-type: none"> <li>1. Chinese books(LMS655)— heat-set tissue repair (3/4)</li> <li>2. VOC chart— Flatten again</li> </ol>
11/5	<ol style="list-style-type: none"> <li>1. Chinese books(LMS655)— heat-set tissue repair (3/4)</li> <li>2. Emergency— insect-freeze</li> <li>3. VOC chart— straining the second of the parchment map</li> </ol>
11/6	<ol style="list-style-type: none"> <li>1. Chromolithograph(U4215 NK11683)— documentation</li> <li>2. Emergency— insect</li> <li>3. VOC chart— complete the second of the parchment map</li> </ol>
11/9	<ol style="list-style-type: none"> <li>1. Rare map(RM2071)—surface cleaning, consolidation</li> </ol>
11/10	<ol style="list-style-type: none"> <li>1. Rare map(RM2071)—finish consolidation</li> <li>2. Frame the VOC chart</li> <li>3. Pick the objects</li> </ol>
11/11	<ol style="list-style-type: none"> <li>1. Chromolithograph(U4215 NK11683)—removed the uncomfortable tissue repair, wet cleaning</li> <li>2. Make chart frame sample</li> </ol>
11/12	<ol style="list-style-type: none"> <li>1. Rare map(RM2071)— washing, flattening</li> <li>2. Chromolithograph(U4215 NK11683)—consolidation the creases</li> </ol>
11/13	<ol style="list-style-type: none"> <li>1. Rare map(RM2071)— the front and back pages washed, flattened</li> <li>2. Freezing finished—cleaning by vacuum.</li> <li>3. Chinese books(LMS655)— heat-set tissue repair (3/4)</li> <li>4. Discussion—photograph</li> </ol>
11/16	<ol style="list-style-type: none"> <li>1. Chinese books(LMS655)— heat-set tissue repair (4/4)</li> <li>2. Photograph gelatin print—flyspeck removing and surface cleaning</li> </ol>
11/17	<ol style="list-style-type: none"> <li>1. Rare map(RM2071)—lining the front and back pages</li> <li>2. Chinese books(LMS655)— heat-set tissue repair (4/4) finished</li> </ol>
11/18	<ol style="list-style-type: none"> <li>1. Chromolithograph(U4215 NK11683)—mending the tears</li> <li>2. Documentation—printing(PIC52711), manuscript(2261011)</li> <li>3. Rare map(RM2071)—finished</li> </ol>
11/19	<ol style="list-style-type: none"> <li>1. Print(PIC52711)—discussion, surface cleaning</li> <li>2. Manuscript(2261011)—heat-set repair(part2)</li> </ol>
11/20	<ol style="list-style-type: none"> <li>1. Manuscript(2261011)—heat-set repair(part2)</li> <li>2. Print(PIC52711)—washing</li> </ol>

	3. Photograph gelatin print—consolidation
11/23	1. Discuss the manuscript (2261011) with Sophie and Lydia. 2. Manuscript(2261011)—surface cleaning.
11/24	1. Manuscript(2261011)—toning repair tissue, washing item(p.1-p.4) 2. Chromolithograph(U4215 NK11683)—inpainting test
11/25	1. Print(PIC52711)—inpainting test, mending 2. Manuscript(2261011)—washing item(p.5-p.8) 3. Chromolithograph(U4215 NK11683)—filling of loss.
11/26	1. Manuscript(2261011)—washing item(p.9-p.12) 2. Photography- Gelatin print—flattening. 3. Chromolithograph(U4215 NK11683)—filling of loss.
11/27	1. Manuscript(2261011)—washing item(p.9-p.13) finished, start to mend the tears and crease. 2. Photography- Gelatin print—flattening and lining. 3. Print(PIC52711)—mending finished.
11/30	1. Manuscript(2261011)—mending 2. Watercolor project—documentation, take off the frame and start to take away the backing. 3. Photography- Gelatin print—consolidate locally tears, and finished.

# The Report of the National Library of Australia

Date: 01/12/2009-05/02/2010

Date	Program
12/1	<ol style="list-style-type: none"> <li>1. Book binding, magazine (Band News) finished.</li> <li>2. Watercolor(PIC/13591/13)—backing removal.</li> </ol>
12/2	<ol style="list-style-type: none"> <li>1. Watercolor(PIC/13591/13)—backing removal.</li> </ol>
12/3	<ol style="list-style-type: none"> <li>1. Watercolor(PIC/13591/13)—backing removal.</li> </ol>
12/4	<ol style="list-style-type: none"> <li>3. Watercolor(PIC/13591/13)—backing removal.</li> <li>4. Digital program—heat-set repair book(LMS676).</li> </ol>
12/7	<ol style="list-style-type: none"> <li>1. Watercolor(PIC/13591/13)—backing removal finished.</li> <li>2. Digital program—book finished(LMS676).</li> </ol>
12/8	<ol style="list-style-type: none"> <li>4. Lab visiting—National Museum of Australia</li> </ol>
12/9	<ol style="list-style-type: none"> <li>3. Watercolor(PIC/13591/13)—remove adhesive in the verso and washing</li> <li>4. Chromolithograph(U4215 NK11683)—consolidate mending</li> </ol>
12/10	<ol style="list-style-type: none"> <li>4. Box making</li> <li>5. Chromolithograph(U4215 NK11683)—filled with the cellulose powder to loss and flatten again</li> </ol>
12/11	<ol style="list-style-type: none"> <li>3. Watercolor(PIC/13591/13)—washing, mending tear</li> <li>4. Newspaper(NP321.644 AVS)—flatten, mending tears and crease, rebind.</li> <li>5. Box making—Map boxes</li> </ol>
12/14	<ol style="list-style-type: none"> <li>2. Watercolor(PIC/13591/13)—flatten by damping and pressing</li> <li>3. Stan Cross(-)—surface cleaning, mending tears, and removal stain(adhesive)</li> <li>4. Manuscript(2261011)—repair tears and consolidate crease</li> </ol>
12/15	<ol style="list-style-type: none"> <li>3. Big map(G8991.G46)—flatten, consolidation</li> </ol>
12/16	<ol style="list-style-type: none"> <li>3. Chromolithograph(U4215 NK11683)—fill with cellulose powder to loss, inpainting</li> </ol>
12/17	<ol style="list-style-type: none"> <li>2. Magazines(Monthly)—mold cleaning, rebinding</li> </ol>
12/18	<ol style="list-style-type: none"> <li>2. Big map(G8991.G46)—finished</li> <li>3. Manuscript(2261011)—repair tears</li> <li>4. Box making</li> </ol>
12/21	<ol style="list-style-type: none"> <li>5. Box making</li> <li>6. Manuscript(2261011)—mending tears</li> </ol>
12/22	<ol style="list-style-type: none"> <li>1. Box making</li> <li>2. Manuscript(2261011)—mending tears and crease</li> </ol>
12/23	<ol style="list-style-type: none"> <li>2. Map box making</li> <li>3. Manuscript(2261011)—finish mending tears and crease</li> <li>4. Watercolor(PIC U5322,U5321)—backing and tapes removal</li> </ol>
12/24	<ol style="list-style-type: none"> <li>2. Watercolor(PIC U5322,U5321)—adhesive of tapes removal</li> <li>3. Manuscript(2261011)—adjust mends</li> </ol>

Date	Program
1/4	3. Sketch(129168)—discussion, documentation, backing removal
1/5	<ol style="list-style-type: none"> <li>1. Lab visiting—NGA</li> <li>2. Sketch(129168)—wash baking paper</li> <li>3. Sketch(129168)—tone papers fill loss</li> </ol>
1/6	<ol style="list-style-type: none"> <li>5. Lab visiting—NAA</li> <li>6. Sketch(129168)—tone papers fill loss</li> <li>7. Chromolithograph(U4215 NK11683)—overpainting</li> </ol>
1/7	<ol style="list-style-type: none"> <li>4. Chromolithograph(U4215 NK11683)—inpainting</li> <li>5. Map—clean adhesive of backing</li> </ol>
1/8	<ol style="list-style-type: none"> <li>4. Visit to the cold store</li> <li>5. Sketch(129168)—tone papers</li> </ol>
1/11	<ol style="list-style-type: none"> <li>1. NLA storage visiting</li> <li>2. Sketch(129168)—repair tears, crease and loss</li> <li>3. Print(PIC52711)—adjust the edge and inpainting</li> </ol>
1/12	<ol style="list-style-type: none"> <li>1. Lab visiting—AWM</li> <li>2. Print(PIC52711)—adjust the edge and inpainting</li> <li>3. Sketch(129168)—pH and solubility test</li> </ol>
1/13	<ol style="list-style-type: none"> <li>3. VOC chart—discussion, observation and documentation</li> <li>4. Sketch(129168)—Watercolor washing and flatten</li> </ol>
1/14	<ol style="list-style-type: none"> <li>3. VOC chart—test and documentation</li> <li>4. Collect the information of pigments</li> </ol>
1/15	<ol style="list-style-type: none"> <li>1. Adjust the information of pigments</li> <li>2. Albumen print (PIC12360)—take its backing by dry removal, take off the adhesive.</li> </ol>
1/18	<ol style="list-style-type: none"> <li>1. Storage and lab visiting of NGA</li> <li>2. Carbon print—backing removal</li> </ol>
1/19	<ol style="list-style-type: none"> <li>1. Checking the object which was be treated before the exhibition</li> <li>2. Carbon print—backing removal</li> <li>3. Microscope slice of fiber making</li> <li>4. Slant Board Washing System—wash print</li> </ol>
1/20	<ol style="list-style-type: none"> <li>1. Carbon print—clean the adhesive</li> <li>2. Making the pigment slice and observation</li> </ol>
1/21	<ol style="list-style-type: none"> <li>1. Carbon print—clean the adhesive of the front edge</li> <li>2. Making the pigment slice and observation</li> <li>3. Daylight / IR / UV exam</li> <li>4. Light bechimg— print</li> <li>5. Slant Board Washing System—wash print</li> </ol>
1/22	1. UV light color chart

	2. Flatten carbon print by chamber 3. Fiber samples making
1/25	1. Albumen print(PIC12360)- cleaned backing adhesive
1/26	Public Holiday
1/27	1. Chromolithograph(U4215 NK11683)—inpainting, hinge, discuss and finished 2. Discussion about the print (PIC52711)
1/28	1. Albumen print(PIC12360)— cleaning test 2. Sketch(129168)—mend the backing paper
2/29	1. Watercolor(PIC U5321, U5322)— filled the loss and inpainting
2/1	1. Exhibition/ condition reporting of Ballet Russer material
2/2	1. Exhibition/ condition reporting of Ballet Russer material 2. Visiting digitize of NLA
2/3	1. Albumen print (PIC12360) flatten and mending
2/4	1. Albumen print (PIC12360) flatten and mending ( the second time )
2/5	1. Manuscript (2261011) — rebind and finished

※藍色底框部分為澳洲國家美術館實習。

### 3. 修護報告

分列各式報告一份澳洲國家圖書館檢視登錄與修護記錄表、預防性維護記錄表、澳洲國家美術館修護記錄表。



### 3.1 澳洲國家圖書館檢視登錄與修護記錄表

The Report of the National Library of Australia

《Pictures》

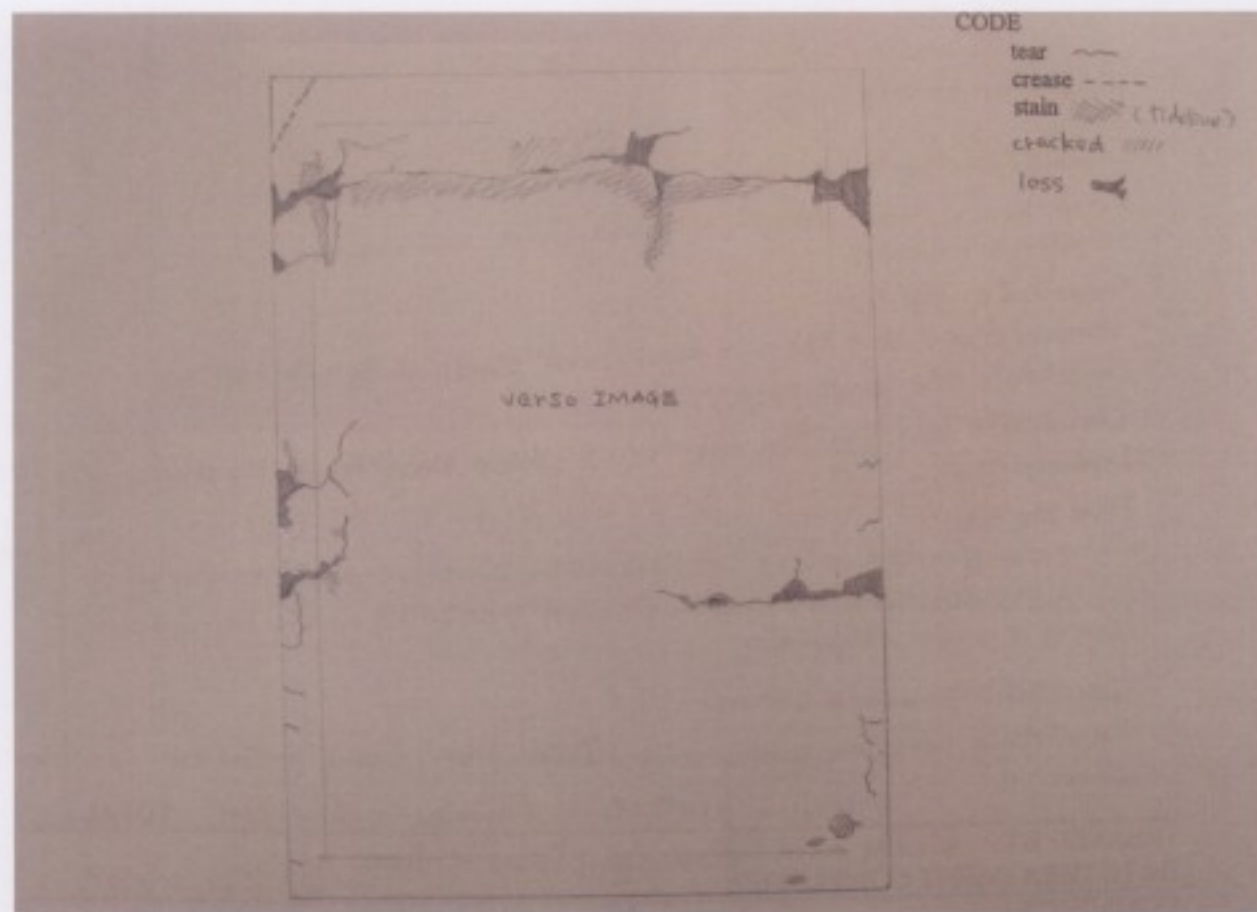
AUSTRALIAN BIRDS



## PRESERVATION SERVICES CONDITION REPORT

TITLE:	AUSTRALIAN BIRDS		
ARTIST:	Rowan, Ellis, 1848-1922	Printer:	SYDNEY GEO MURRAY & co.
Acc. no. :	U4215 NK11683	LOC:	8441-E
Dimension:	h: 614mm	w: 431mm	d: X
Inscriptions:	Handwriting- Ballpoint pen ink " Print? " ( code ) 1888/3 "57.8x39.7 cm"		
DESCRIPTION OF ITEM:	Chromolithograph		
Medium:	Colored print ink		
Support:	machine-made paper		
Accessories:	no		

DLAGRAM (condition before treatment:



NOTES:

1. The different color in the top. One is brighter ( top one ).
2. The tide line is along the before repaired tissue.
3. Some color change may be caused by mounting.
4. Material is very friable. And binding media is sensitive to ethanol.

TREATMENT:

TIME

1. Uncomfortable repairs removal

500minutes

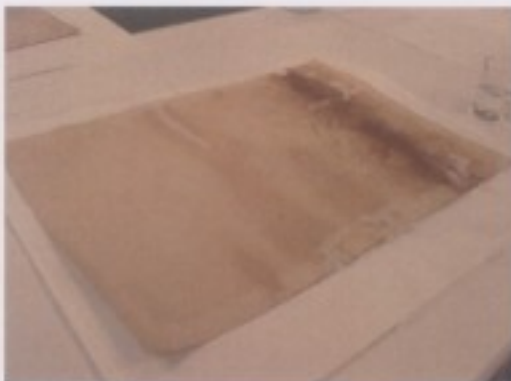
To spray the collection overall by 50% ethanol with water, and brush water on the tissue, don't press item because weak material, use cotton balls to clean the adhesive. Let it dry gently and evenly. ( remove the stain)



Before removal ( recto )



Before removal ( verso )



Just take the main repair because washing.



After removal

2. Washing

200 minutes

Spray 50% ethanol with water to the verso, turn it, and spray 50% ethanol to the Recto. Move item to the suction table, and clean the adhesive ( on the edge ) by cotton balls (Two times ).



Face down on the blotter



Before washing



After Washing

3. Consolidate the tears, mending.

Add the dry wheat paste to the tears that had been repaired with tissue. And mending it.

230minutes



Before consolidate



After consolidate

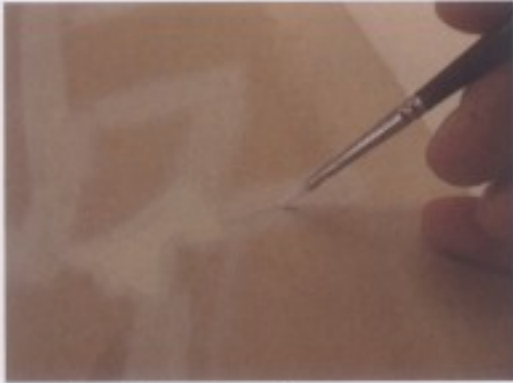


Press by little weight



After consolidate in the front

Add a little paste from former repair of the backing by brush, fixed unstable repair by spatula.



Along the edge of former repair



Fixed by spatula

Heat spatula can speed up drying. But need be careful the friable media of the front ( need cover the most smooth reemay ).



After consolidat

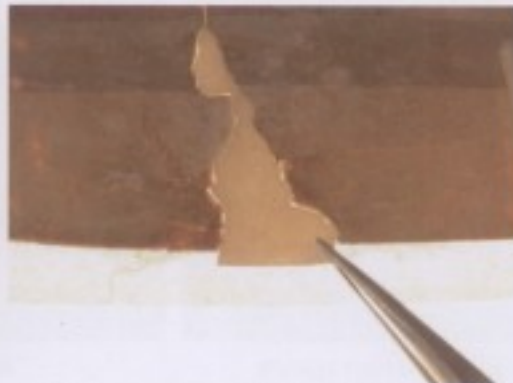
4 Compensate the loss

300minutes

Compensation, use the old paper with wheat paste and heating.



Before compensate



Make a shape with suitable tissue



After compensate

Compensate loss of picture need to care about water.



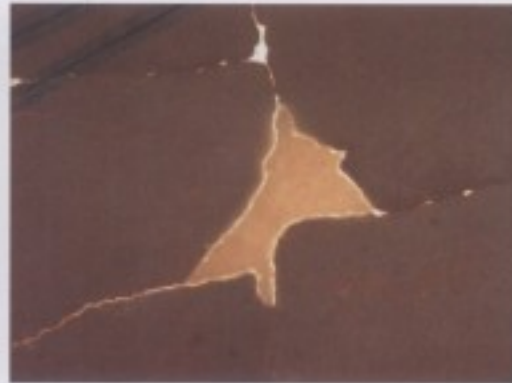
Item faced up



Make shape



Mend by dry paste and heat spatula



After compensate

5. Consolidate tears repair

Consolidate and flatten tears which have been treated with Japanese tissue.

150minutes



Before consolidate



After front consolidate



Mend tears by tissue to strengthen



After mending

Last, joint two big parts, from the pattern area, item faced up and mend locally.

Make sure the continuity of pattern, turn back and mend other section.





Use heat spatula to speed dry



After mending two parts

6. Filled the loss

180minutes

Using the Toasted micro cellulose with wheat paste to fill the little crease ( sometimes heating to avoid get stain ) and inpainting with pastel and Klucel G with ethanol.

Before filled, need brush 50% ethanol( 100% ethanol cause the material powder ) around the loss to avoid cause stain.



Cellulose powder with paste



Fill in the cellulose powder



Immediately dry by heat spatula



After filled



Before filled



After filled

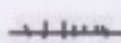
The smallest crack filled in pastel powder with Klucel G (mixed with ethanol). It is hard to put into the correct colour in some crack, just filled with cellulose powder, then inpainting.


## 7. Flatten


15minutes

Some mending still doesn't strong enough because support of print is thick and repair tissue is thin. Therefore put another mending tissue to support.



 Tears

 The first layer mending

 The second layer mending  
( thinner than the first layer )

After mending, some area slightly uneven. In order to avoid uneven to influence inpainting, decide to flatten item again.

Put item between two damp blotters and cover mylar for 40 minutes, and take off the blotters, pressed by board ( not too heavy ).

8. Inpainting

540minutes

Inpainting loss by watercolour. Dark area( no poor area of support ), using pastel to cover it. The weak area covered some pastel powder by slight brushed.



※ Even, correct tone, and correct colour



Inpainting ( must care about water)



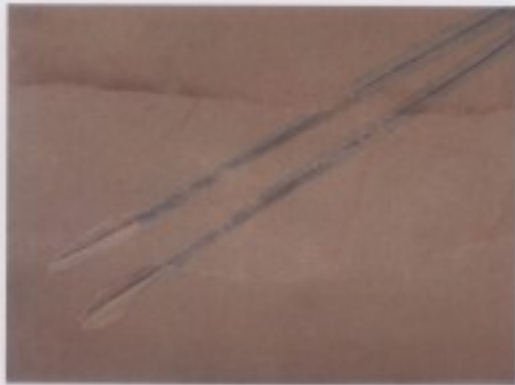
After inpainting



Cover with bright pastel (dots)



Cover the bigger loss of material with pastel



Before inpainting

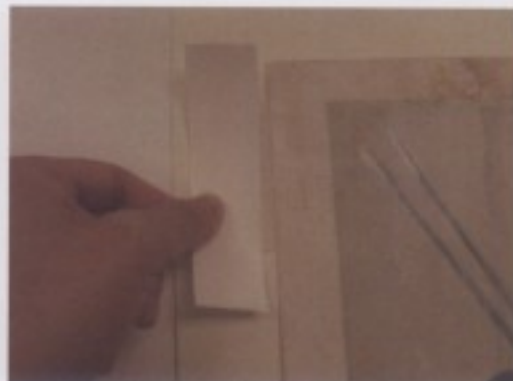


After inpainting by watercolour

9. Mylar protect

T- Hinge to fix the collection onto a board, and cover with thin smooth tissue. Finally, put into mylar protect. ※ Item must be face up because the brittle media.

30minutes



Sticked with thick Japanese tissue and paste Fixed by Tyvek and hinge on mount board



Storage in the mylar pocket with acid-free paper, archive text.

TOTAL | 2145 minutes

TREATMENT BY : Wang,Hsin-Hua

DATE TREATMENT COMPLETED: 2010.01.27

COMMENTS:

※ Material still weak, suggest to face up.

Treatments Photo Records



BT Recto



AT Recto

Treatments Photo Records



BT Verso



AT Verso

Treatments Photo Records



After hinge



### 3.2 預防性維護記錄表

TO BE COMPLETED BY REQUESTING OFFICER – PLEASE PRINT CLEARLY

Name:  Ext:  Date of request:	Section: ( Circle appropriate section )		
	<u>Technical Services</u>	<u>Information</u>	<u>Special Collections</u>
		<u>Delivery</u>	
	Acquisitions/Cataloguing	Main Reading Room	Asian
	Serials/ASEU.	Petherick Reading Room	Pictures
	Special Mat. Cat.	Room	Manuscripts
	Document Supply	Newspapers	Maps
		Stacks	Oral History
		Digitisation	
	Other:		
Call No./ Accession Number: LMS655	<input type="radio"/> Australian <input checked="" type="radio"/> Non Australian		
DESCRIPTION OF ITEM			Vol./Issue: x
Author/ Artist / Composer			
Title: Kuntan Kyuyaku seisho, Shihen 訓點舊約聖書, 詩篇			
Type (Circle appropriate type )	Reason for Request		
Book                      Albums			
Artwork on paper      Map			
Manuscript              Photograph			
Printed Sheet            Object			
Material			
Electronic Media      Oil painting			
Quantity:	Urgent <input type="radio"/> required by reader <input type="radio"/> heavily used		

TO BE COMPLETED BY PRESERVATION SERVICES

Receiving Officer	Date
Treatment Completed by      Wang, Hsin-Hua	Date    07/12/2009
Returned to (section)	
Signature	Date
<input type="radio"/> Complex treatment greater than 5 hours	

USE AS SHELF MARKER

Title: Title: Kuntan Kyuyaku seisho, Shihen

Call No: \_\_\_\_\_

Author/Artist: Dia Eikoku Seisho gaisha

THIS ITEM WAS SENT TO PRESERVATION SERVICES

ON 07/12/2009

BY: Wang, Hsin-Hua

Ext:

WORKFLOW FORM

LMS No. 676

LONDON MISSIONARY SOCIETY

### Condition Report

LMS Number: 676

#### Description

Yokohama: Da; Eikoku Seisho geisha. Meiji 18 [ 1885 ]

橫濱: 大英國聖書會社 明治 18 [ 1885 ]

116p, 19cm

Originally in Chinese with Japanese reading marks



BT Recto



BT Verso

#### Condition

A lot of tears along the age, especially in the front page and the back page. It is weak along the fold of every page. Using the heat-set repair tissue to consolidate the crease and tears.



AT

Preservation  
Staff member

Wang, Hsin-Hua

Date

2009/12/07

### 3.3 澳洲國家美術館修護記錄表

## Internship in paper conservation section

### A. Treatment Report

Accession Number:

Artist:

NATIONAL GALLERY OF AUSTRALIA  
CONDITION REPORT WORKS OF ART ON PAPER

Object: Photograph Carbon Print  
Artist /Origin: Porting  
Artist Nationality:  
Title / Description:  
Date of Work:  
Signature / Date: LRC Black ink (H.G Porting)  
Inscriptions:  
Assoc. Doc: Evidence of past red circular label ( NZ South Seas Exhibit- 1925-1926)

#### MEDIUM:

Pigments and binder

#### SUPPORT:

Mechanical-paper

Sheet Size: HxW

576mmx455mm

Chain Lines : → ↑

Plate Size: HxW

Laid Lines: → ↑

Image Size: HxW

Watermark :-

#### SECONDARY SUPPORT

Frame / Other :

Previous History :

Exhibition / Loan History: Change cover in Feb. 2010

NATIONAL GALLERY OF AUSTRALIA  
CONDITION REPORT WORKS OF ART ON PAPER

Condition :

1. Fully lined onto board.
2. Secondary support is slightly bowed.
3. Overall light discoloration.
4. Cracking of the emulsion (very light).  
LRC- this also might be due to pressure used when signing.
5. Some obvious retouching in production.
6. A brown line along top edge, visible.
7. One black mount removed,
8. One mount removed some paper remnants from mount still adhered to edge.

Technical Examination: Ultraviolet; Infrared; Transmitted; Microscopy; Test...

Solubility test: Cold water +2  
Warm water +1

Treatment:

1. Top black mount removed



Support is slight bowed



Fully lined onto board

2. Backing removed by piloting the 3% MC with water, spit, or 50% ethanol and water.



Brush 50% ethanol and water



It's easy to take off the backing paper by piloting the 3% MC with water. (wait for 15minutes)



Some information between backing paper and item, like publish mark.



After removal, clean adhesive by damp cotton ball.



Clean some paper remnants from mount still adhered to edge

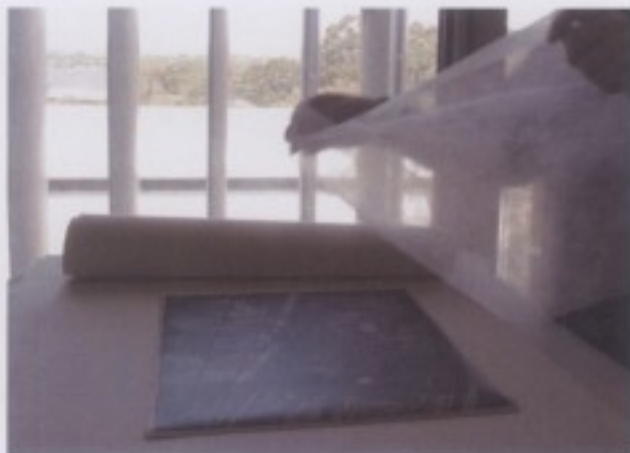
3. Flatten- Humidification by chamber for 4 hours.



Chamber (heating/ light/ humidifier/ fan)



100% rel. for 4 hours



Cove finest reemay



Press by wool felt

Conservator: Wang, Hsin – Hua  
12/01/09

Date:



#### 4. 澳洲國家修護單位相關資料

DECEMBER 2009 NATIONAL LIBRARY OF AUSTRALIA



*The*  
NATIONAL LIBRARY  
magazine

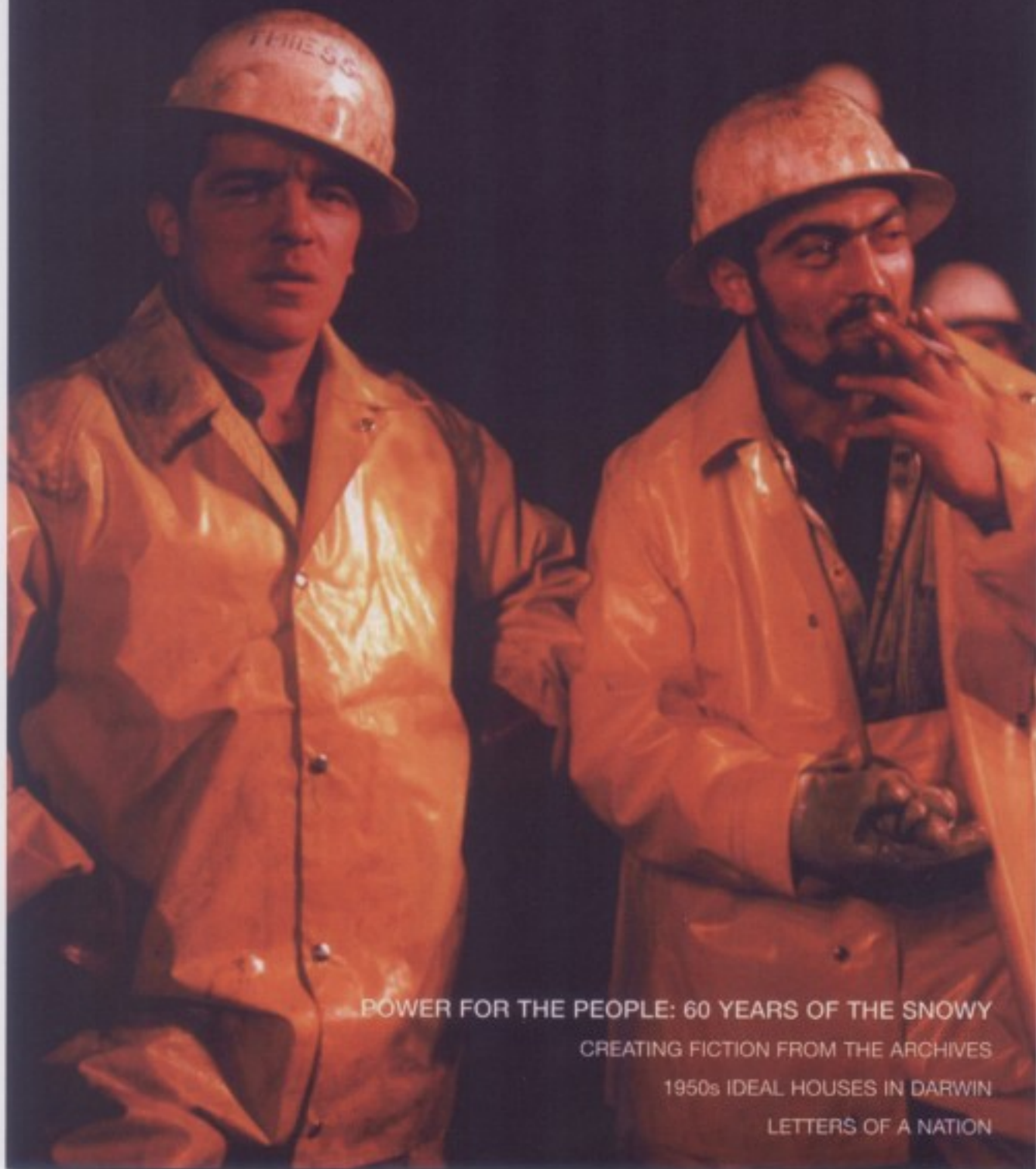
# LIBRARY



AUSTRALIA'S WILD PLACES :: LAVISH ILLUMINATIONS :: FINE FISHING  
WITHIN "KIMONO" DISTANCE :: FEISTY FLYERS :: AND MUCH MORE ...

# Memento

NATIONAL ARCHIVES OF AUSTRALIA | 2009



POWER FOR THE PEOPLE: 60 YEARS OF THE SNOWY

CREATING FICTION FROM THE ARCHIVES

1950s IDEAL HOUSES IN DARWIN

LETTERS OF A NATION