

**MINUTES**

**ANNUAL GENERAL MEETING**

25 – 26 November 2010,  
Tasmanian Museum & Art Gallery  
40 Macquarie St  
Hobart TAS

**NOTE:** SEE SUMMARY TABLE OF ACTIONS AT THE END OF THIS DOCUMENT

**Thursday 25 November.** Meeting opened 10.30am

**ITEM 1.** Welcome, Introductions & Correspondence

**1A. Member Attendance:**

<b>Member agency</b>	<b>Representative</b>
Australian Biological Resources Study (ABRS)	Alice Wells (AW)
Australian Museum (AM)	Penny Berents (PB) (Vice Chair)
Australian National Fish Collection (ANFC)	Alastair Graham (for Peter Last (PL))
Australian National Insect Collection (ANIC)	David Yeates (DY) (Public Officer & Executive Committee)
Australian National Wildlife Collection (ANWC)	Leo Joseph (LJ) (Executive Committee)
Council of Heads of Australian Entomological Collections (CHAEC)	Beth Mantle (BM) (also attending FCIG) & David Yeates
Museum Victoria (MV)	Mark Norman (MN)

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Queensland Museum (QM)	John Hooper (JH) (Chair)
South Australian Museum (SAM)	Steve Donnellan (SD)
Tasmanian Museum and Art Gallery (TMAG)	Catherine Young (CY) & Andrew Rozefelds (AR) & Ruth Mollison (notes)
Western Australian Museum (WAM)	Mark Harvey (MH) for Di Jones (DJ)

**Observers/ invitees:**

Atlas of Living Australia (ALA)	Bryan Kalms (BK)
TMAG	Ruth Mollison (minutes)

**Apologies:**

Secretary/ Treasurer	Sarah Verschoore (SV)
Museum and Art Gallery of the Northern Territory (MAGNT)	Chris Glasby (CG)
Queen Victoria Museum & Art Gallery (QVMAG)	-

**1B. Correspondence In & Out**

In response to the sudden and recent changes to senior staffing related to natural history collections at QVMAG the Chair of CHAFC sent letters to (and received responses from) the Premier of Tasmania, the Director of Local Government Division & the Minister for Local Government supporting the timely resolution of disruptions to this institution in terms of CHAFC core business. Copies available upon request to the Secretary/ Treasurer.

**ITEM 2. Minutes of CHAFC previous General Meetings, May 2010 in Brisbane, and 26 August via teleconference (circulated prior to meeting).**

Summary of Actions Outstanding from the Minutes of the 26 August 2010 and 6-7 May General Meetings via teleconference and in Brisbane, respectively. (Note: Both sets of minutes of those meetings were already approved by members at General Meetings via phone and email).

	<b>ACTIONS OUTSTANDING</b>	<b>TO DO</b>	<b>ACTION</b>
<b>From General Meeting 26 August 2010</b>			

<b>ITEM 2</b>	(a) Invoices for annual membership fees gone out, or going out.  (b) Issue of QVMAG representative for CHAFC still unresolved	(a) SV to complete invoices for membership  (b) JH to write to Council for nomination of new QVMAG representative	<b>(a) Completed</b> <b>(b) JH to contact new Director, Richard Mulvaney (commences 6 December) re: invitation for place on CHAFC</b>
<b>ITEM 8</b>	AQIS. SD noted that SAMA have permit to import any tissues or DNA from outside Australia, inspected once at the border. PB noted that she had heard nothing further from AQIS regarding the consultative committee.	Chair to write to AQIS regarding their biological consultative committee and report back to CHAFC	<b>PB has emailed &amp; telephoned AQIS re: CHAFC seat on the biological consultative committee. No response yet Feb 2011</b>
<b>From General Meeting 6-7 May 2010</b>			
<b>ITEM 4a</b>	ABRS update. Pam Beesley updated CHAFC on activities of ABRS over the past few months, noting many staff changes and some positions are still to be filled.	Pam Beesley will email SV summary of ABRS report for circulation to CHAFC members	<b>Lapsed</b>
<b>ITEM 4b</b>	National collection standards: a discussion paper had been produced with the understanding that this may assist with institutions procuring future Federal funding by setting a benchmark process. This procedure was put on hold late 2009 by Cameron Slatyer.	PBeesley to circulate project plan for National Collection Standards to CHAFC.	<b>Standing item on agenda (see Item 8 on the current AGM agenda, below)</b>
<b>ITEM 4b</b>	Bush Blitz presentation –issues related to timing (seasonality) and some operational concerns of the proposed NRS Bush Blitz expeditions, and ability of CHAFC institution members to participate	Chair to contact Bush Blitz senior officer for a complete list of proposed reserves and	<b>Completed. BB Schedule is now posted on the BB website</b>

		proposed timeframes, as per the NRS schedule presented at the meeting.	
<b>ITEM 5</b>	Bush Blitz curatorial/ databasing contract - members expressed concerns about several issues involved in preparing the Draft Final Report to access the CHAFC accessioning and databasing funding	ABRS to inform lead agencies of BBs (and CHAFC) of the proposed list of participants who received contracts for that BB in order for the lead agency to coordinate assembling data for the Draft Final Reports.	<b>Parts still remain unresolved. JH to have discussion with Director ABRS in December to resolve these.</b>
<b>ITEM 6</b>	CHAFC & OZCAM websites – uncertainty of date of establishment of CHAFC	PB to ask Doug of correct year and inform EW & BM to emend accordingly	<b>Completed (date is 1993). FCIG to emend web site accordingly</b>
<b>ITEM 7</b>	ALA will have a sensitive data service	FCIG wants information denatured across entire data.	<b>FCIG have developed checklist to implement (e.g. pests, R&amp;Ts etc)</b>
<b>ITEM 8</b>	FCIG requests CHAFC to review copyright and disclaimer statement on OZCAM website	Approve or update copyright disclaimer on OZCAM website	<b>Action. CHAFC members to review and advise Secretary, who will collate and advise FCIG accordingly (by end of February)</b>

			2010)
<b>ITEM 9</b>	'Cindarella collections' – significant collections at potential risk through simple policy changes within institutions	Standing agenda item	<b>On AGM agenda (see Item 11 below)</b>
<b>ITEM 12a</b>	Improving relationship between the CAMD Natural Science Alliance and CHAFC.	PFS proposed to chase up and circulate the CAMD NSA minutes to CHAFC members.	<b>Completed, although no current CHAFC member on CAMD. Secretary of CHAFC to send copy of minutes to Exec. Officer CAMD once approved by members</b> <b>Completed</b>
<b>ITEM 12b</b>	OZCAM MOU - now lapsed and institutions (not CHAFC members), need to reaffirm ongoing institutional support for OZCAM as the museums' portal for collection data delivery.	PB to email out revised MOU to each core member institution for signing.  Additional minor corrections noted	<b>Chair CHAFC to send covering letter with new MOU to relevant CEOs/ Directors, including a copy of the CHAFC AGM minutes</b>
	Acceptance of minutes of August 2010 General Meeting	Moved: SD Seconded: LJ	<b>Nil</b>

### **ITEM 3. Accounts & Auditor's report for CHAFC Inc.**

**3A.** Chair tabled Audited accounts and auditor statement for 09-10.

**Action.** Members to approve the auditor's statement and annual financial statement. Proposed: SD, Seconded: MN. Carried by meeting.

**Action.** Chair to complete appropriate form and submit this with statement to the ACT Office of Regulatory Services. Completed (DY to post documents from Canberra).

**3B.** Chair also tabled interim accounts from June 2010 until present for information, to show members some of the expenses and payments made in the first year of real operations by CHAFC.

DY suggested shopping around for a competitive price for an auditor. DY also questioned whether there were any ongoing annual fees required to lodge annual returns.

**Action.** Chair suggested there were no annual fees, but recommended that the Secretary to check on website, and if necessary with the ACT Office of Regulatory Services directly to verify this supposition. Secretary to check. – Annual fees dependant on Company income. Last financial year was \$34 to submit Audit report.

**Action:** ANFC & ANWC to check whether their 2010-11 annual membership fees for CHAFC have been paid (only two payments yet made by the 3 CSIRO collection agencies). **Now completed (December 2010)**

**ITEM 4. Annual election of office bearers.**

Chair declared all 3 executive positions vacant. PB (previously nominated as Returning Officer) called from nominations from the floor. 3 nominations received and accepted. No further nominations so all 3 current executive committee were returned to office.

<b>Elected Position</b>	<b>Nominated officer</b>	<b>Moved/ Seconded</b>
Chair	John Hooper.	MN/SD
Council member	Leo Joseph	MN/SD
Council member	David Yeates	MN/SD
<b>Ex-officio Position</b>	<b>Officer</b>	
Vice Chair (immediate past Chair)	Penny Berents	
Secretary/ Treasurer (nominated by Chair)	Sarah Verschoore	

**Action.** Chair to notify ACT Office of Regulatory Services of current CHAFC executive committee.

**ITEM 5. Member reports**

**5A.** Members summarized reports and undertook to submit electronic copies for inclusion in the minutes (see Appendices; ticks indicate that reports have been received as of January 2011):

- Australian Biological Resources Study – Alice Wells ✓
- Australian Museum – Penny Berents ✓
- ANFC – Alastair Graham ✓
- ANIC – David Yeates ✓
- ANWC – Leo Joseph ✓
- Council of Heads of Australian Entomology Collections – David Yeates
- Museum & Art Gallery of the Northern Territory – Chris Glasby (tabled, read to meeting by JH) ✓
- Museum of Victoria – Mark Norman
- Queensland Museum – John Hooper ✓
- South Australian Museum – Steve Donnellan ✓
- Tasmanian Museum and Art Gallery – Rozefelds/ Cathy Young ✓
- Western Australian Museum – Mark Harvey ✓
- Queen Victoria Museum & Art Gallery – Nil received

**5B.** JH proposed to assemble a CHAFC capability statement based on member's supplying their organizational structure and staffing as it pertained to the natural history collections.

**Action.** Members to send organization structures/ staffing to JH to assemble into a draft document

#### **ITEM 6. CHAFC & FCIG joint session**

**6A.** Summary of FCIG business to CHAFC by EW.

**Action.** Nil

**6B.** Presentation and demonstration of the Atlas of Living Australia by Bryan Kalms. Discussion of ALA Road trip(s), potential launch(es), and individual institutional agreements

**Action.** CHAFC to request FCIG to clarify, and if necessary obtain advice from ALA regarding appropriate creative commons licenses to reduce risk of commercial use of institutional specimen data. ALA has used the Creative Commons with Attribution license, whereas some institutions might wish to supply data to ALA with CC Attribution Non-commercial licenses.

**Friday 26 November**

## ITEM 7. Caring for Country National Reserve System Bush Blitz Program

- AW provided an update on the Bush Blitz (BB) program.
- *Discussion on data provision to ABRS:* There are issues with the responsibility of data provision after field trips. Bottlenecks are occurring with some major groups of invertebrates. A proposal was put forward to provide the lead agency with curatorial money, followed by a second payment upon the submission of 500 data points as a minimal amount. There was concern that this proposal will conflict with contracts and doesn't fit with the notion of species discovery (but rather with the concept of 'surveys'). These were broken down into the following major items for clarification:

### 7A. Scheduling of trips

- Request that proposed schedule for Bush Blitz trips be made available again to members.  
[Action: AW to request BB team to forward schedule]
- Serious concerns from Mark Norman re time available for organisation of Western Victoria trip; inadequate time available for acquisition of permits, especially for consultation with Indigenous land owners and ethic approvals, but also for scientific permits.  
[Action: AW to discuss this with BB team; BB team to report back to MN]
- Timing of announcement of BB Grants critical to BB survey participants. [Action: AW to raise this with ABRS Director]
- JH noted that April is possible month for re-scheduling of Central Queensland trip, any later not suitable.  
[Action: AW to pass this concern to BB team]

### 7B. Proposed pro-forma for reporting

- There was a lengthy discussion on the CHAFC Bush Blitz accessioning and curatorial funding contracts, and to develop a more useful/ meaningful reporting mechanism for CHAFC. For example:
  - 2 payments (1<sup>st</sup> upfront when survey completed, 2<sup>nd</sup> when data are received in a format useful to ANHAT)
  - Develop a standard reporting template for Lead Agencies to complete and return to CHAFC, providing better accountability of Lead Agencies to demonstrate achieving milestones agreed to by ABRS BB contracts with CHAFC.
  - Perhaps a signed statement from Lead Agencies to CHAFC to specify the amount of data entered into the database, giving CHAFC confidence that a (specified) minimum amount of data has been databased and supplied to ABRS.



- Concerns re disconnect between reporting (to ABRS) and payment by CHAFC to institutions for curatorial work. Purpose of \$300k [+\$100k in 2011] clarified: This is for use by the State institutions for curatorial purposes, not a payment to individuals for the sorting and ID necessary for reporting. These latter elements are covered by separate funding to field scientists.  
[Action: **AW to discuss this with ABRS Director and BB team; ABRS to report back to CHAFC**]
- Concerns re problem of handling of large collections. Support expressed for delivery of set quota of data (500 data points) for ANHAT as fulfilment of requirement for final payment to institution.  
[Action: **Action: AW to discuss with ABRS Director and BB team**]
- Still some concern by CHAFC about the difficulty of managing 3<sup>rd</sup> parties participating in BBs (i.e. scientists from institutions other than the Lead Agencies, engaged directly by ABRS, but expecting a proportion of the CHAFC curatorial and database funding). Issues include what are minimum numbers of specimens expected for zoological samples (cf. CHAH fund only up to 500 rows of data). How does CHAFC regulate the 3<sup>rd</sup> parties in terms of milestone payments, etc.

**Action:** ABRS to offer suggestions on how to break down milestones for reporting and the eventual dispersal of the CHAFC curatorial and accessioning funds.

**Action:** Chair to meet with Director of ABRS to discuss possible models, and report back to CHAFC.

### **7C. JH Actions (December 2010) since the AGM:**

JH caught up with Michael Preece at the ABRS Advisory Committee Meeting in December, about the several issues with dispersing the BB curation and accessioning funds through CHAFC.

(1) ABRS's issue is that CHAFC needs to be more accountable that all BB data have been delivered before all BB curation funding is dispersed to lead agencies.

The proposed solution is for CHAFC to initially provide a "purchase order" to the relevant lead agency to supply a "service", stipulating a split payment of: 1. Initial payment (e.g. 60%) and 2. Final payment upon completion of the "service" (e.g. 40% of funds). This would need 2 separate invoices from lead agencies to CHAFC - a pain, but solving their concerns with commonwealth purchasing standards. The stated "service" on the purchase order would be something like "(1) Curation and accessioning of specimens, and (2) delivery of specimen data for xxxxxxxxxxxxxxxx NRS Bush Blitz survey etc", whereby final payment would depend on evidence of, or a declaration that all data have been delivered.

(2) CHAFC issue of each lead agency needing to have better control over "subcontractors" in terms of their contributions to a particular BB, especially curated specimens and delivered data, before they are eligible for any payment, as we discussed at the Hobart meeting. CHAFC had proposed at the Hobart meeting to follow the CHAH model (payment for a minimum number of around 500 samples).

However, Michael noted that CHAH arrived at the figure of 500 through tracking the actual costs of curation and accessioning validated by the AVH. He suggested that CHAFC should consider developing a similar median curation cost to regulate specimen and data delivery, and appropriate payment to "subcontractors".

In relation to how CHAH arrived at the figure of 500 (it is actually 660), I checked again with David Cantrill. CHAH pay ONLY when specimen data are actually delivered through AVH, which can be monitored easily by CHAH. Unfortunately not all CHAFC agencies can deposit data easily in OZCAM, although the ALA are working on it, but I suspect that by the time OZCAM is able to track these things for us the BB project will be nearly completed.

In relation to CHAFC developing a similar model, QM attempted to track the costs for its collection verification and valuation process, and basically arrived at the conclusion that developing a median curation cost across all zoological phyla is meaningless (e.g. costs of thousands of specimens of insects from pitfall traps versus costs of tens of specimens of reptiles collected). While it could be argued (from David's response below) that the CHAH model of 660 specimens includes "actual costs of identifying, curating and databasing a specimen" - whereby BB curation and accessioning funding is implicitly only for the latter two of these processes, I'm not sure we can determine an actual cost of specimen curation etc equivalent to CHAH, that would pass muster through ABRS scrutiny. If anyone can do this, and can justify the costs, please let us know.

If not, should we bother ? Can we survive without stipulating a minimum number of data rows ?

(3) PB raised the issue of BBs in a particular state or territory not having any (or minimal) participation by the relevant lead agency, and therefore who would be eligible for the CHAFC curation and accessioning funds for that particular BB. Michael also raised this issue at our meeting, and suggested CHAFC consider this further.

The floor is still open for this discussion. We should keep in mind that these funds are primarily for curation and databasing according to the ABRS contracts. Whether CHAFC also want to include "identification" component on the spirit of this project, as CHAH appears to have done, the consequences will flow on to the "subcontracting" issue as well.

(4) For information: Judy West emphasized that BBs were primarily all about species discovery, not surveys, which was reassuring given the previous emphases on the project, and that another term might be more appropriate for this project. There are also hints that BB might lead onto a BB2 in the future, with the implication that it is worthwhile CHAFC getting its processes right, right now, including continuing dialogue with ABRS, to take up new opportunities without the chaos we have encountered thus far.

As a result of this discussion, JH prepared the following summary of the major unresolved issues related to CHAFC's role in BBs:

- Reaffirmation that the BB project is all about species discovery, and not really about surveys (e.g. Ecological or environmental health surveys).
- Agreeing on a reporting format that is useful to all parties (I.e. not simply reiterating what BB participants submit directly to ABRS as a result of their individual contracts with ABRS).
- Developing a payment protocol (eg 2 tiered payment) based on proof of delivery of agreed contract data milestones. This should be expanded to include delivery of fully curated specimens to the public museums ("lead agencies"), assuming the interpretations below are correct.
- Confirmation that the primary purpose of the BB Curatorial And Accessioning Funds (BBCAFs) is for the data delivery (via OZCAM or other interim means) and deposition and long term curation of BB specimens in the public collections (versus the perception by some that these funds are for additional taxonomic resolution). That is, that BBCAFs is about ensuring the well being of and access to the BB specimens as a public benefit, versus the intent of the other pools of ABRS/ BB/ Caring for Country/ BHP Billiton funding related to the field collection of specimens, their sorting and identification, and more in-depth taxonomic studies on them.
- Confirmation that irrespective of whether or not "Lead agencies" (state, commonwealth or territory public museums) are the predominant participants in a particular BB, or whether or not BB collections might temporarily reside in a "Cinderella collection", that all specimens are eventually destined for one of the public collections either by law (WA, NT) or by collection permit conditions (NSW other jurisdictions). In other words, these BBCAFs will ensure BB specimens become a publicly accessible asset for the future, with eligibility for 2nd tier funding by the public institutions determined by completion of data delivery. (This latter aspect is the complicating factor in the interpretation of these BBCAFs since it requires the prior completion of IDs).

#### **ITEM 8. National Standard for Faunal Collections**

This was requested to remain a standing item on the agenda by ABRS several years ago.

**Notes from conversation with Cameron Slatyer (Mark Norman, 25 November 2010):** Whilst Director of ABRS Cam Slatyer (CS) strongly

supported developing a national standard for faunal collections. These ideas were never documented, to our knowledge at least, and as such MN volunteered to contact CS to better document the concept with the potential to raise the issue again. CS's rationale was that with a national collection standard CHAFC and member bodies would be driving their own destiny, versus having constraints or agendas driven by external entities. The standard would formalise museums and other collections as the representative bodies. The scope would be restricted to the formal status of Statutory Protected Collections.

Perceived Benefits:

- Avoids the state-level audits as a regular problem
- Document provides explanation of the nature, functioning and structure of these institutions
- Pushback from external interference
- National framework to protect from unpredictable and at times onerous state impositions

Possible mechanisms:

- ABRS to wear costs of set up
- Take 3-18 months to set up a standard (e.g. based on the European model standard)
- Go through consultative process with stakeholders
- Engage CHAFC as a statutory independent body

Possible models for establishment:

- Private company establishing new standards, dealing with Standards Australia, or
- 'Ultracheap' to do it yourself, but have to go through several iterations

Cam's concern was that one member is going to come a "cropper". The resulting standard would look official without being bogged down in other people's processes. Standards Australia said that if it is the first national standard in the world, it can be proposed as an ISO, thus having more credibility with accountants/auditors.

Proposed to develop the Australian standard in stages:

1. Develop for Herbaria – start with large collections and with time take on issues of smaller herbaria.
2. Develop more complicated standard for diverse faunal collections.
3. The overall aim was to set an "aspirational standard".

**Action: Nil.** While members agreed that there were some very good reasons to push for standards to protect biological collections from e.g. external interference, CHAFC should at this time only keep a "watching brief" on this as it would need to include all collections, not only zoological ones.

#### **ITEM 9. ALA & CHAFC Rapid Digitization Proposal (AM & SAMA)**

PB summarized the intent to submit a draft proposal to ALA for funding of approximately \$200k to digitize components of the zoological collections at AM and SAMA using their respective volunteer workforces (AM & SAMA in-kind contributions of \$252k and \$15k in cash).

It was suggested that the proposal could be overseen by CHAFC as it had the potential to run out to all member agencies if successful.

The draft executive summary is as follows:

**Proposal**

*To establish an imaging and database service which utilises volunteers to digitise content for access by the Atlas of Living Australia and other web based biodiversity applications. The project would be run jointly by the South Australian Museum (SAMA) and the Australian Museum (AM) and would involve developing suitable work practices, procedures and equipment that could be applied by a scalable volunteer workforce. Funding sought is for the employment of a project manager at the SAMA, a volunteer coordinator at AM, and the equipment required for testing and defining the practices and procedures. A significant role of these trials will be for testing functions of the ALA's Volunteer Portal. Once a model is developed and tested, outcomes will be promoted to other CHAFC members for the purpose of assisting their own collections digitisation efforts. It is requested that at this point the ALA will provide funding to CHAFC members to purchase the equipment identified through these trials so that they can implement the models in their own institutions.*

With the approval of the executive committee the Chair sent a draft proposal to the ALA.

However, the concept of CHAFC charging an administration fee (e.g. 5%) to recoup staff time was also discussed, and members largely agreed this was worthwhile exploring, for example, to provide CHAFC itself with some funding for its own projects.

**Actions:** Chair to contact Chair of CHAH to see whether they have an administration fee. **Done (JH December)** (fees levied for special projects only where administrative support is needed beyond abilities of CHAH membership)

Chair to subsequently contact Peter Doherty at ALA to emend the costings of the draft proposal to include a CHAFC fee. **Done (JH December)** (5% administrative fees approved by Director of ALA and emended costing proposal from CHAFC was acceptable to ALA)

**ITEM 10. 'Cinderella collections'**

At the request of the 2010 May General Meeting this item was to be a standing item on the CHAFC meeting agendas.

JH provided an update on the current situation with the University of Queensland Insect Collection (UQIC).

In brief, the curator of the DEEDI (formerly QDPI) insect collection, Shawn Winterton, was cross-appointed with UQ to also be the curator of the UQIC. He had intended that UQIC would be moved to the new Ecosciences Precinct at Boggo Road, and had therefore ensured that the new compactus storage

system was installed with sufficient space to amalgamate the two collections (each with just over 2,000 drawers).

Shawn has since resigned and moved back to the US, and the position of curator of the DEEDI collection is currently in recruitment. There is, apparently however, no intention by either UQ or DEEDI to renew the cross appointment for these collections, thus leaving the UQIC vulnerable.

Moreover, at a meeting between QM and the former and new Heads of School of Biosciences at UQ, Scott O’Neil and Mark Blows, UQ expressed their concern over the integrity and protection of the UQIC, while at the same time noting that there were strict timelines to remove it from the Goddard Building at St Lucia due to a major rebuilding program there, and their preference for the UQIC to be protected under an Act (such as the Queensland Museum Act 1974). They also noted alleged interest in the UQIC by ANIC and the Natural History Museum London.

QM are engaging in further dialogue with DEEDI & UQ, and also investigating the possibility of installing compactus within the existing entomology store at South Bank, to ensure the UQIC has a viable future as one of the three major Queensland arthropod collections.

**Action:** JH to inform CHAFC of any further progress with the fate of the UQIC.

#### **ITEM 11. Collection auditing, verification and valuation issues**

Prior to the meeting PB circulated the link to the NSW Auditor General’s report ‘Knowing the Collection’ as background to the issue ([http://www.audit.nsw.gov.au/publications/reports/performance/2010/museum\\_collections/collections\\_contents.htm](http://www.audit.nsw.gov.au/publications/reports/performance/2010/museum_collections/collections_contents.htm)).

PB provided a summary of the threats to and responses by the AM to this report and actions required by the auditors, related specifically to the physical auditing, verification and security of their collections. The AM must do an inventory every quarter, with each collection manager auditing 200 items then reporting this. There is a regular check on the types.

WA does random checks and an inventory of valuable items over \$25,000. The types are in this category.

JH provided a summary of a similar situation at the QM but with emphasis by auditors on the valuation of the collection, their questioning of the veracity of the current valuation method (derived by an independent valuation agency), and the impossible task of providing a value to those collections that were not yet databased or registered, as works in progress (or WIPs), and the dispute between auditors and QM over when biological collections actually acquire a significant value (e.g. when does a significance assessment occur along the process of: the cost at the time of collection, cost to curate, research and publish on collection items, cost to database and maintain collections, etc.). QM is currently seeking a methodology that will calculate an annual cost of acquiring collections up to when they become registered and databased, to demonstrate “financial immateriality” (i.e. <5%) of the cost of collection acquisition against the current value of the entire collection. QM has to verify the value of the collection to treasury. It is now valued on the cost of recollection, specific to where and what. Holotypes are valued at a median

value of around \$16,000 each. There is a random check of items from the database.

Members discussed various issues with auditing and valuing at their institutions.

**Action: PB requested any auditing procedures from other CHAFC members.** It was also recommended that members circulate auditing requirements of their institutions amongst each other on a regular basis when issues like these arise.

## **ITEM 12. National tissue collections**

### **12A. Gap analysis of tissue collections – Leo Joseph**

Background: possibility of CHAFC & CHAH conducting a gap analysis to identify gaps at the continent-wide scale for different groups as these collections underlie the capacity to ever generate the kind of data that we need to understand genetic diversity and that policy would be designed to conserve and manage.

**Actions: LJ.** Possibly could be managed by CHAFC.

Through possible funding sources such as suggested in Item 9, CHAFC engage a consultant to research, highlight and communicate that museums hold an invaluable genetic resource of Australia's fauna, to promote the future of collections.

Would need to include more than just faunal collections (CHAH, CHAEC, CHAMC)

FCIG to ensure that if a "tissue sample field" is included in individual museum databases then these should be exported to OZCAM and be displayed.

**12B.** JH also spoke to the information circulated to CHAFC prior to the meeting by Ben Phillips, Parks Australia, regarding the recent UN resolution at the Nagoya Convention on Biological Resources, whereby there have been recommended changes to the protocols on access to genetic resources and the transfer of genetic material between nations, and that signatories would operationalise these changes through their respective legislations.

**Action:** Chair to meet with Ben Phillips in Canberra during the week of the ABRS Advisory Committee Meeting to obtain more details and potential impacts of proposed legislative changes to faunal collections and their current exchange of tissues worldwide etc. **Done (JH December)** brief summary of conversation is as follows:

- Nagoya Convention agreed to by member nations, but not yet signed (could take up to 2 years according to Ben). Most of the obvious concerns relate to recognising "trigger points" – differentiating between commercial and non-commercial etc.
- Under Article 13 parties are required to take measures to facilitate the monitoring of utilization of genetic resources and compliance with the

protocol, including the designation of one or more checkpoints at which compliance would be confirmed. This has the potential to create a new and unnecessary layer of administrative burden for users.

- Checkpoints will be achieved by individual national legislations in each country (i.e. not by any new overarching UN functionality)
- Australia is likely to not change its current access regime but will change checkpoints of incoming material downstream (somehow, like how GST operates, but by whom ?)
- There will be some obvious significant impacts on biological collection agencies, but probably mainly related to greatly increased paperwork and potentially challenging timing issues of moving species around the world in the absence of a universal and unequivocal documentation regime (and achieving such a regime might take a lot longer).
- Checkpoints: Holders of collections will need to demonstrate ownership of collections and any conditions of use that might be associated with them, demonstrating this to those countries to whom they are sending the collections, such as non-commercial research permits showing evidence of compliance to CBD etc.
- Department of Environment currently exploring ways to facilitate movement and access to collections by bona fide collection agencies and researchers e.g. such as through developing documentation to accompany exported collections/ material transfer agreements etc  
Dept of Environment keen to work with CHAFC (and others) to develop workable protocols, pro formas and model documentation as appropriate.
- State agencies now also examining this issue, as are several commonwealth agencies (e.g. AIMS). Watch this space !

### **ITEM 13. Values of Australia's biological collections**

Environmental Economics Research Hub (EERH), Australian National University, survey of users of Australia's biological collections, estimate hidden value, seeking key users of these collections to participate in survey – (<http://biocollections.questionpro.com>)

**Action:** CHAFC members urged to go online and complete questionnaire.

### **ITEM 14. CHAFC logo**

JH proposed to change the “flower” on the website that precedes the letters CHAFC to something else, perhaps representing an animal, and adopting that symbol as its logo as well

EW subsequently noted that FCIG independently proposed a stylized sea urchin would be consistent with the space and theme of the website.

Sarah Verschoore previously volunteered to have a go at designing a logo.



**Action:** SV to draft some logos (symbol (e.g. urchin) + microtext “CHAFC” underneath it, and circulate to members of CHAFC and FCIG for their input)  
**DONE**

**ITEM 15. CHAFC – OZCAM Memorandum of Understanding**

Carried over from General Meeting 6-7 May 2010. See summary Actions table.

**NEXT MEETING:** CHAH proposed a simultaneous meeting with CHAFC in Perth whereby one or more sessions could be held collaboratively, for their respective AGMs during the second half of 2011. The next General Meeting was proposed to be held in Adelaide, possibly in mid-May 2011.

**Meeting closed Friday 4.00pm**

## Attachments

### CHAFC Inc. AGM – November 2010 Member Reports 2009-2010

**Organisation:** Australian Biological Resources Study  
**Author:** Alice Wells  
**Date:** 13 December 2010

**ABRS** — Alice Wells conveyed apologies from newly appointed ABRS Director, **Michael Preece**, unable to attend due to conflict with CHAH.

#### **ABRS Staffing matters** —

- Bush Blitz team comprises **Jo Harding** who replaced Amy Jarrot in February, as Manager, but has recently taken maternity leave, position to be filled temporarily until Jo returns in May 2011; **Kate Gillespie** and **Leah Schwartz**. Polly Hemming, a graduate trainee was with the BB team for 3 months from early September.
- Grants and Business Officer position vacant and will be filled in short term from within ABRS. To be advertised for permanent filling early in the New Year.
- IT/AFD projects Pam Beesley, Alice Wells and Erika Alacs handling AFD contracts and checking of data with data management support from Christy Geromboux; Richard Park, filling for Robyn Lawrence, handling data migration associated with ALA projects.

#### **ABRS Projects** —

- **AFD** progressing well. Some 42 contracts set up, handled through ABRS and funded from ALA money, most well underway. June to November almost 3,000 new valid species added to AFD, numerous taxa updated.
- **Bush Blitz trips.** Undertaken to date — one in Western Australia, 2 Queensland, 2 New South Wales, one Tasmania, 2 South Australia; Central Qld trip proposed for November, postponed due to access and safety concerns. Next surveys currently scheduled for 2011 include Western Victoria & Northern Territory.
- **Bush Blitz Grants.** Decisions on grants were delayed while administrative matters were formalised; applicants were given the opportunity to update elements of their applications. ABRS Advisory Committee to meet 6-8 December to recommend grants to be funded. Results of deliberations will be released as soon as possible.

**Organisation:** Australian Museum  
**Author:** Penny Berents

**Date: 22 November 2010**

**Collections –**

- Dr Mandy Reid appointed as Collection Manager, Malacology
- All collection teams have conducted field trips this year for collection development including participation in Bush Blitz.
- Auditor General report 'Knowing the Collections' tabled in parliament.
- More than 400 loans sent comprising 28,665 specimens.
- Key acquisitions include 2000 specimens from a staff member participating in a survey of Antarctic benthos; 120 specimens of skinks from New Caledonia; polychaetes from Ningaloo and Heron Island as a part of C-Reefs; purchase of a Western Long-beaked Echidna; marine invertebrates and fishes from Bass Canyon; 156 high quality set specimens of Australian swallowtail butterflies.

**Research –**

- The total value of grants received in 2009-10 was \$1,106,262 with an average value of \$32,537.
- Five new research staff appointed, Dr Shane Ahyong (Crustacea), Dr Elena Krupriyanova (Polychaetes), Dr Frank Koehler (land snails), Dr Andrew Mitchell (Entomology), Dr Nerida Wilson (molluscs).
- Dr Zoe Richards appointed as Post-Doctoral Chadwick Fellow.
- Dr Maria Capa, appointed as Post-Doc in polychaetes.
- ARC Linkage grant with UNSW and DECCW to study fine scale climate and invertebrate distribution.
- ARC Discovery grant to study larval fish.
- Head of Research, Dr Brian Lassig appointed as Assistant Director, Research and Collections. Position of Head of Research filled in Acting capacity by Dr Rebecca Johnson, Manager of DNA Lab.

**Informatics –**

- 1.6 million records in EMu , 800,000 delivered to OZCAM. (That is our next challenge)
- Contract with ALA to develop ideas for virtual volunteers to accelerate the rate of digitization.
- Participated in joint bid with other cultural agencies to NSW Government for funding for digitization of collections.
- Conducted a successful trial to digitize and develop a search tool for collection registers.
- Conducting a pilot project to use volunteers to digitize specimens and labels from cicada collection.
- Implemented new fields in EMu to manage tissue and genetic material.
- Collections search on line implemented on AM web site.

**Organisation: Australian National Fish Collection**

**Author: Alastair Graham**

**Date: 12 November 2010**

### **Collections –**

- Staff – 1.2 FTE
- Types – 1 holotype and 44 paratype lots added this year. The Collection now holds 195 holotype and 1540 paratype lots.
- Great Barrier Reef/Torres Strait Seabed Biodiversity project - incorporation of specimens continues – now 623 lots covering approximately 300 species. Some 10,000 specimens (most frozen, some preserved) remain to be sorted and identified.
- Tissue collection - continues to grow and now contains over 15,000 tissues covering 2,000 species from the Indo-Pacific. More than 10,000 tissues have been COI barcoded.
- Photographic Index of Australian Fishes - expanded and now contains 36,030 images, covering more than 3,000 species in the Indo-Pacific region.
- Visiting scientists - hosted 5 visitors, who spent 38 days working in the Collection.

### **Research –**

- Staff – 3.0 FTE
- “Sharks and Rays of Borneo” - published (NSF-funded). This is the first comprehensive reference on the 118 species of sharks, rays and chimaeras of Borneo.
- Regional Marine Planning - Data collated by staff working in the CERF Biodiversity Hub and utilising the ANFC underpinned the Regional Marine Planning process undertaken by DEWHA. A landmark publication detailing a novel hierarchical approach was published in *Biological Conservation*. These data are also being used to provide an improved understanding of the origins Australia’s marine biota and how to better manage our marine resources.
- Climate change - Historical datasets, including those held by the ANFC, were used to demonstrate major distributional shifts, in response to climate change and fishing practices, in 45 species of temperate fishes. These findings were published in *Global Ecology and Biogeography*.
- Indonesian teleosts – A series of surveys of Indonesian fish markets to examine the species composition and to conduct rapid market assessments to characterize the fisheries. Over 800 species have been collected so far. One of the end products will be a field guide to the fishes.

### **Informatics –**

- Staff – 1.4 FTE
- The collection database contains 48,282 lots (148,099 specimens), of which 29,970 lots (or approximately 62% of the records) with valid species identifications are available on OZCAM. A further 6,900 lots (14% of the records) are larvae identified only to family level. These records do have latitude/longitude data and could also be made available to OZCAM.

**Organization:** Australian National Insect Collection  
**Author:** David Yeates  
**Date:** December 2010

## ***People***

### **Divisional merger**

- The big news for ANIC staff this year was the announcement of a merger between CSIRO Entomology and Sustainable Ecosystems (previously known as Wildlife and Ecology). The two divisions have been combined to form a multidisciplinary science division called CSIRO Ecosystem Sciences. Management and staff have been working hard to ensure a smooth transition to the new structure, and to maintain “business as usual” in the collection.
- In addition, there is a desire to relocate the Australian National Wildlife Collection (ANWC) to Black Mountain as part of the merger process, and to physically integrate the collections that are now managed in one Group. Feasibility studies are underway to investigate this possibility.

### **Staff changes**

- Helen Tongway (curation support) and Marianne Horak (Lepidoptera) have both retired in 2010. While Helen will enjoy more time gardening, we anticipate Marianne will be back in the ANIC as a Post-retirement Fellow in the next few months!
- We welcome several new staff members to the ANIC, including some familiar faces of people who have spent time with us in the past. Kim Pullen (formerly an Insect Identification and Advice Officer and Collection Manager) has rejoined ANIC on the ABRS Coleoptera Checklisting project. Ewa Slipinski, who has been associated with the ANIC as both a volunteer and casual, has been engaged on both the ABRS Coleoptera and Nematoda Checklisting projects. We also welcome Debbie Jennings, previously a database officer at the Queensland Museum, and now contributing to the ABRS Coleoptera Checklisting project.
- The following staff continue in their current roles:

1		50		
2	○ Natalie Banks	51		○ Ainsley Seago (OCE
3	(Zimmerman Weevil	52		Postdoctoral Fellow
4	Technician);	53		with Steve Cameron);
5	○ Natalie Barnett	54		○ Steve Shattuck
6	(Database	55		(Formicidae);
7	management);	56		○ Adam Slipinski
8	○ Steve Cameron	57		(Coleoptera);
9	(Molecular	58		○ Fiona Spier (Insects of
10	Systematics);	59		Australia On-line –
11	○ Nicole Fisher	60		currently on maternity
12	(Hymenoptera);	61		leave);
13	○ Abdul Gafur (PhD	62		○ You Ning Su
14	Student with Mike	63		(Lepidoptera);
15	Hodda);	64		○ Michael Thompson
16	○ Nicole Gunter (OCE	65		(Remote Microscope
17	Postdoctoral Fellow	66		Network Officer);
18	with Steve Cameron)	67		○ Thomas Wallenius
19	○ Anne Hastings	68		(PhD student with Rolf
20	(Scientific illustration)	69		Oberprieler);
21	○ Bobbie Hitchcock (PhD	70		○ Tom Weir (Senior
22	Student with Marian	71		Curator: Hemiptera and
23	Horak);	72		Coleoptera);
24	○ Mike Hodda			○ David Yeates (Diptera)
25	(Nematoda);			
26	○ John La Salle (Director			
27	of ANIC, Hymenoptera);			
28	○ Cate Lemann			
29	(Coleoptera);			
30	○ Bryan Lessard (PhD			
31	Student with Dave			
32	Yeates);			
33	○ Jia Hui Li (PhD Student			
34	with Adam Slipinski);			
35	○ Anita Lyons (AQIS			
36	Entomologist);			
37	○ Chris Manchester			
38	(Diptera);			
39	○ Beth Mantle (Collection			
40	Manager);			
41	○ Robyn Meier			
42	(Formicidae and			
43	Lepidoptera Checklist			
44	compiler);			
45	○ Leigh Nelson (Schlinger			
46	Postdoctoral Fellow			
47	with Dave Yeates);			
48	○ Rolf Oberprieler			
49	(Zimmerman Fellow);			

73

74 • Honorary Research Fellows & Post-Retirement Fellows

- 75      ○ Don Colless (Diptera)
- 76      ○ Max Day
- 77      (Hemiptera/Lepidoptera)
- 78      ○ Ted Edwards (Lepidoptera)
- 79      ○ Bruce Halliday (Acarina)
- 80      ○ Laurence Mound
- 81      (Thysanoptera)
- 82      ○ Dave Rentz (Orthoptera)
- 83      ○ Barry Richardson
- 84      (Araneae)
- 85      ○ Don Sands (Lepidoptera)
- 86      ○ Alice Wells (Trichoptera)
- 87      ○ Jane Wright (Coleoptera)



## 88 **Volunteers**

89 The volunteer program, coordinated by Tom van Gerwen, continues to provide  
90 invaluable support to ANIC research and curation activities. The ANIC currently  
91 engages 23 volunteers who spend between 7 and 15 hours per week in the  
92 collection:

93

- Beryl Reed
- David Baird
- David Ferguson
- Glenn Cocking
- Greg Fletcher
- Bernice Falkenberg
- Janette Lenz
- Grit Beyer
- Stefan Beyer
- Kenneth Webster
- David Portway
- Jenny Campbell
- Judith Clark
- Judith Evans
- Mary James
- Peter Macnicol
- Rita Romaniuk
- Robert Tompsett
- Sandy Roy
- Stefan Beyer
- Tom Van Gerwen
- Violet Najisepasgozar
- Annie Tassie

## 94 **Visiting Scientists**

95 ANIC hosted 86 visiting scientists and researchers from July 2009 to June 2010,  
96 and these visitors spent 514 combined days working in and around the  
97 Collection.

## 98 **Tours**

99 Tours of the collection occur regularly, and are in high demand from visiting  
100 research scientists, conference and workshop participants, school groups, special  
101 interest groups and CSIRO staff. The most recent public tours formed part of the  
102 National Science Week program in Canberra, which saw more than 100 members  
103 of the public visit the collection in four tours over three days. Our staff conducted  
104 28 ANIC tours and more than 360 people were shown through the collection in  
105 2009-2010.

## 106 **Technical Training Courses & Websites**

107

108 It is unlikely that the ANIC Technical Training Course will be reinstated despite  
109 there being continued interest in this sort of course. More emphasis is being  
110 placed on the development of web-based training and resources and  
111 opportunities in this area, particularly in collaboration with the Atlas of Living  
112 Australia, will be investigated over the coming months.

113

114 Anita Lyons led an intensive three day Bee Diagnostics workshop for six AQIS  
115 entomologists to train them in the identification of native and exotic bees and  
116 some of their pests including mites, fungal diseases and the small hive beetle.

117

118 The Taxonomy Research and Information Network (TRIN) “What Bug Is That?”  
119 website was launched last year and continues to benefit from the addition of

120 updated interactive keys. The site provides identification keys to and  
 121 information on more than 600 Australian insect families.  
 122 (<http://anic.ento.csiro.au/insectfamilies/>).

## 123 **Collection Management & Curation 2009-2010**

### 124 **Loans & Enquiries**

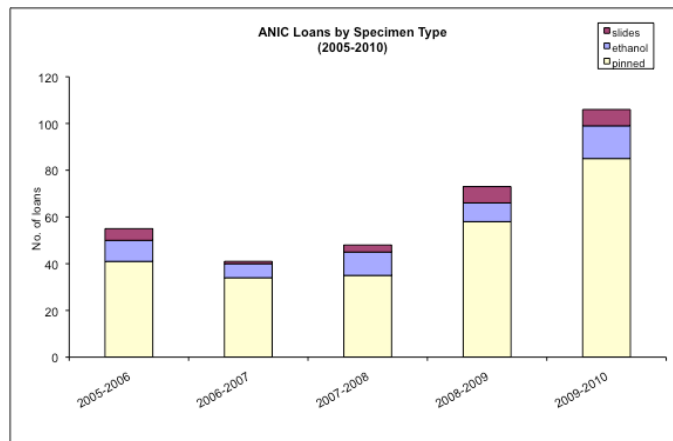
125 The rate at which specimens were dispatched on loan to various domestic and  
 126 international research partners continued to increase during 2009-2010 (Figure  
 127 1).

128

129 As with last year's data, this trend is likely due to implementation of the BioLink  
 130 loans module for the management of ANIC loans, which had led to more accurate  
 131 tracking of loan activity within the collection.

132

134 Retrospective loan recovery  
 136 is proceeding at a slow and  
 138 steady pace. While it was  
 140 initially hoped that all  
 142 current and outstanding  
 144 loans would be entered into  
 146 the BioLink loan module by  
 148 June 2010, this has proved to  
 150 be unrealistic.



### 152 **Donations**

154 We have received several  
 156 major donations over the last  
 157 12 months, predominantly consisting of collections of Coleoptera, Hemiptera,  
 158 Lepidoptera, Orthoptera and Phthiraptera. We would like to thank the following  
 160 donors and their families for  
 162 their generous contributions  
 163 to the ANIC: Mr Kelvyn Dunn; Dr Marianne Horak; the late Durno Murray and the  
 164 Murray family; Dr Dave Rentz; the late Barry Salkilld and the Roy family; and the  
 165 late Ken Sandery and the Sandery Family.

Figure 1. ANIC loans data from 2005 – 2010.

### 166 **Whole-drawer imaging**

167 With funding from the Atlas of Living Australia, the ANIC is trialling a SmartDrive  
 168 SatScan™ imaging system that creates ultra-high resolution images of whole  
 169 insect drawers. We hope the resulting images can assist with virtual curation of  
 170 the collection, including loan requests, auditing, high-level identification and  
 171 specimen sorting. This initiative will lead to improved bioinformatics delivery  
 172 for biological collections, via the Atlas of Living Australia (ALA).

### 173 **Remote Microscope Network**

174 The Remote Microscope Diagnostic Network project is continuing to create  
 175 significant impact both nationally and internationally. There are now fully  
 176 operational nodes in each Australian state and territory. An exciting  
 177 development has seen the use of the network as a training tool for AQIS

178 personnel, and Rolf Oberprieler has successfully conducted a mango weevil  
179 identification course.

180

### 181 **Backyard Bugs Coin Collection**

182 Beth Mantle has a starring role in a coin series recently released by the Perth  
183 Mint. Backyard Bugs is part of the Mint's Young Collectors series and the nine \$1  
184 coins feature Australian invertebrates. The Mint contacted Beth when they were  
185 looking for an entomologist to check the facts in the booklet that comes with the  
186 coins. Their next request was for a short profile on how Beth became interested  
187 in bugs and how she ended up as the Collection Manager at ANIC. So at the back  
188 of the booklet is information on Beth and a rather nice photo  
189 ([http://www.youngcollectors.com.au/backyard\\_bugs/](http://www.youngcollectors.com.au/backyard_bugs/)).

### 190 **Key Links**

191

192 Australian National Insect Collection: [www.csiro.au/anic](http://www.csiro.au/anic)

193 ANIC Staff Profiles: [www.csiro.au/places/ANIC-staff.html](http://www.csiro.au/places/ANIC-staff.html)

194 ANIC Resources: [www.csiro.au/places/ANIC-publications.html](http://www.csiro.au/places/ANIC-publications.html)

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199 **Organization: Australian National Wildlife Collection**

200 **Author: Leo Joseph**

201 **Date: November 2010**

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- 203 • The major event affecting ANWC and ANIC has been the merger of  
204 CSIRO Sustainable Ecosystems and Entomology on July 1, 2010. We  
205 now both sit in CSIRO Ecosystem Sciences. Within that Division,  
206 ANIC and ANWC have formed a Systematics and Collections group  
207 with two streams, one of science and one of collection management.  
208 The charts below describe our administrative structures but we still  
209 exist as separate collections on separate sites in Canberra and still  
210 have somewhat independent day-to-day operations. This should slowly  
211 change. The merger has prompted CSIRO to start thinking more  
212 seriously about shifting ANWC to Black Mountain and we are currently  
213 looking at a new custom-built Collections Facility. In truth, nobody  
214 really knows when or how this will happen. So for the foreseeable  
215 future ANWC is at Gungahlin, ANIC at Black Mountain.
- 216 • Within ANWC, we currently may be facing battles to retain two  
217 positions. One is due to Research Scientist Ken Aplin announcing his  
218 early resignation/retirement in about March next year. There is no  
219 certainty that the position will be retained but I have been advised to  
220 fight for it early next year.
- 221 • As of 23 November 2010, it is apparent that a redundancy will be  
222 offered to Ian Mason. Ian has been a technician and collector with  
223 CSIRO since 1969 and has been a huge part of the ANWC's growth. I  
224 stress that he is actually happy to take a package and that he and I  
225 have discussed this at some length during 2010. Neither he nor I want  
226 his position to be lost. For me it is a strategic opportunity to fill it with

227 an invigorated new young scientist/collection manager. I have been  
 228 assured that my long-running pleas to revitalize this position with such  
 229 a strategic new appointment have been heard very clearly. So I am  
 230 reasonably confident that this position will be kept but retention and  
 231 replacement of Ken Aplin’s position may well require more of a battle in  
 232 the New Year.

- 233 • TRIN postdoctoral Fellow Fred Ford will finish in his position on  
 234 December 31 and CSIRO Postdoctoral Fellow Gaynor Dolman has  
 235 officially concluded but is still engaged in writing up.
- 236 • CSIRO has continued its cash contributions to ALA and is currently  
 237 funding through ANWC two short-term contract positions. One is to  
 238 digitize bat vocalizations and deliver them to ALA. The other is to  
 239 prepare, as a pilot scheme for delivery to ALA, digital images of all  
 240 specimens of the avian genus *Cinclosoma* and all ANWC bird type  
 241 specimens.
- 242 • A field trip in July 2010 to the East Kimberley resulted in some 558 bird  
 243 specimens being collected. We are pursuing the possibility of a joint  
 244 project across CSIRO collections doing biodiversity surveys at the  
 245 Argyle Diamond Mine.
- 246 • The table below was prepared in response to a recent internal request  
 247 for information. We are in the process of registering birds collected in  
 248 July 2010 and in October-November 2010. Subfossil material has been  
 249 gathered through the TRIN project and is a challenge.

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<b>Specimen group</b>	<b># registered</b>	<b># unregistered</b>	<b># unregistered types</b>
Birds	53500	500	
Mammals	35800	1000	
Reptiles	11000		
Amphibians	3100		
Eggs	16600	5200	
Sound recordings	60000		
Parasites	9500		
Sub fossils	2500	200000	
Fossils		50000	5 to 15
<b>Total</b>	<b>192000</b>	<b>256700</b>	

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 255 **Organisation: Museum & Art Gallery of the Northern Territory**  
 256 **(MAGNT), Natural Sciences Unit**  
 257 **Author: Chris Glasby**  
 258 **Date: November 2010**

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261 **2009-2010:**  
 262 **Collections**

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- **Accessions.** Formal accessioning of 4222 lots of zoological specimens was achieved during this period. The total number of registered lots as at 1 July 2010 was 207,968.
- **Loans.** The MAGNT runs an active program of inward and outward loans across the Collection in support of regional and national exhibitions and research programs. During this period 60 outward loans and 6 inward loans were initiated, prepared and or returned, amounting to 3926 specimens.
- **Databasing.** All faunal databases now hosted on the database server (previously some had to be accessed as stand alone data files). Discussions continue with the Department (NRETAS) about options for getting our data copied onto the other side of the firewall so it can be accessed by the OZCAM aggregator. Considerable effort was also made in cleaning data and maintaining/updating the taxonomic information. Emphasis was placed on linking image and tissue data with the collections.

## Research

- **Staffing.** As of November 2010 there were 2 FTEs MAGNT funded curators in the Natural Sciences (Molluscs, Annelids) , 1 FTE (Entomology) funded from elsewhere in the Department, 1 FTE funded from an external grant (Bioprospecting), and 3 vacant positions (Terrestrial Vertebrates, Cnidarians and Fishes). Currently there are 4 FTEs in collections management of Natural Sciences at MAGNT.
- **Conferences and Workshops.** Staff and research associates in Natural Sciences attended 10 national and international conferences, delivering 14 oral presentations and 6 posters. The major conferences were the Charles Darwin 200 Symposium (Darwin), the Darwin 200: Evolution and Biodiversity Conference – the joint conference of the Australian Entomological Society's 40<sup>th</sup> Scientific Conference/Society of Australian Systematic Biologists Meeting/ 9<sup>th</sup> Invertebrate Biodiversity and Conservation Meeting (Darwin), the Australian Coral Reef Society's Annual Meeting (Darwin), Molluscs 2009: The Triennial Meeting of the Malacological Society of Australasia (Brisbane), the NT Threatened Species Forum (Darwin), the CSIRO Sustainable Ecosystems Forum (Darwin), the Fourth Australian National Insect Collection Moth Workshop (Canberra), the Atlas of Living Australia & Biolink Workshop (Canberra), Sage 2009 (London, UK), the Workshop on Sponges of the Ningaloo Rise (Perth), and the 10<sup>th</sup> International Polychaete Conference (Lecce, Italy).
- **Academic publications.** Staff in Natural Sciences produced 41 peer-reviewed academic publications in national and international scholarly

- 313 journals. They also published 6 books, 1 CD, 3 scholarly monographs,  
 314 5 popular articles and 3 chapters in books.  
 315
- 316 • **Academic Publications program.** One issue of the *Beagle* (volume  
 317 25) was published in December 2009 containing 12 scholarly articles in  
 318 additions to the Abstracts from the Keynote speeches delivered at the  
 319 Charles Darwin 200 Symposium. *Supplement 4 to The Beagle* was  
 320 also published in December 2009. Authored by Clemency Fisher and  
 321 John Calaby, it is entitled 'The Top of the Top End: John Gilbert's  
 322 Manuscript Notes for John Gould on Vertebrates from Port Essington  
 323 and Cobourg Peninsula (Northern Territory, Australia); with Comments  
 324 on Specimens Collected during the Settlement period 1838 to 1849,  
 325 and Subsequently'. One MAGNT *Technical Report* was published on  
 326 the freshwater fishes of Groote Eylandt.  
 327
  - 328 • **Awards.** Dr Chris Glasby was awarded a Temminck Fellowship by the  
 329 Natural History Museum of Leiden (NATURALIS).  
 330
  - 331 • **Grants received.** Almost \$175, 000 won in external grants, comprising  
 332 Bioprospecting Coral Reef Research, Foundation (CRRF) USA, \$121  
 333 924; Polychaete Research, ABRS-CReefs, \$31 700; Polychaete  
 334 Research, Taxonomy of Pilargidae, ABRS, \$8 800; Terrestrial  
 335 Invertebrate Biodiversity Research Western Australian Government  
 336 Department of Environment and Conservation, \$12 000.  
 337

### 338 Other information

- 341 • **Retirements.** 2009-2010 saw two retirements, Dr Paul Horner (Curator  
 342 of Terrestrial Vertebrates) and Dr Helen Larson (Curator of Fishes).  
 343
- 344 • **Exhibitions.** Dr Paul Horner, provided much of the intellectual content  
 345 for the new exhibition *Supercrocodylians: Darwin's ultimate survival*  
 346 *story* which was opened on 12 Feb 2009 and runs until 16 Jan 2011.  
 347 *Supercrocodylians* demonstrates Charles Darwin's theory of evolution  
 348 through crocodylians and features an array of crocodylian specimens  
 349 from ancient fossils to modern examples, including Australian fossil  
 350 species from the last 100 million years.  
 351
- 352 • **Public enquiries.** Natural science staff answered 989 public enquiries  
 353 from to identifications to general biology information to public, government,  
 354 consulting companies, university (Charles Darwin University),  
 355 collectively amounting to over 600 hours.  
 356
- 357 • **Consultancies.** Staff in Natural Sciences were engaged in 9 consultancies  
 358 this Financial Year. Foremost among them were the Coral Reef Foundation  
 359 for the collection and taxonomy of marine organisms for bioactive screening  
 360 at the US National Cancer Institute (principally sponges), work undertaken for  
 361 AQIS and NT Fisheries on identification of marine species posing a major risk  
 362 to biosecurity (molluscs), the Geoscience Australia benthic survey of the  
 363 Joseph Bonaparte Gulf (sponges, molluscs, polychaetes), participation in all

364 three C-Reefs expeditions (polychaetes), the Survey of Darwin Harbour for  
 365 Introduced Marine Pests (molluscs and polychaetes), the investigation of  
 366 microbial communities in high nutrient environments (sponges), and the  
 367 Groote Eylandt freshwater fish survey (fishes).

- 368
- 369 • **Supervision.** Senior staff in Natural Sciences acted as supervisors for 6  
 370 students for post-graduate degrees. Staff also supervised 8 volunteers  
 371 working at MAGNT.
- 372
- 373 • **Scientific visitors.** Staff in Natural Sciences hosted visits by 34 national and  
 374 international visitors to study the MAGNT collection who collectively spent  
 375 about 150 hours studying and identifying our collections, and  
 376 interacting with curators. This number was greatly boosted by the events  
 377 related to the Charles Darwin anniversary.
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380 **Organization: Museum Victoria**  
 381 **Author: Mark Norman**  
 382 **Date: 2010**

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390 **Organization: Queensland Museum, Biodiversity & Geosciences**  
 391 **Programs**  
 392 **Author: John Hooper**  
 393 **Date: November 2010**

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#### Collections -

- 396 • The ‘State Collection’ (as defined by specimens and objects recorded  
 397 in the Vernon CMS) grew by 36,986 (up from 26,212 registered in 08-  
 398 09), although many, many more thousands of specimens were also  
 399 collected, defined as the ‘Research Collection’, which is estimated to  
 400 be now about 9 million specimens (mainly unregistered and/or  
 401 undatabased geological, entomological and molluscan specimens –  
 402 much of this material has never had a significance assessment applied  
 403 to it, and hence it is not a genuine ‘backlog’).
- 404 • 288 new localities were investigated and collections undertaken (up  
 405 from 254 in 08-09), with 1085 person days of fieldwork. Outward  
 406 research loans included about 5,800 specimens, and an audit of the  
 407 Loans Out procedures is also being undertaken by QM this year.
- 408 • A new QM website was launched, including information on about  
 409 40,000 specimens although with few images yet, including type  
 410 collections, but far more comprehensive information will be available  
 411 through OZCAM and ALA when technical help to do this is completed.  
 412 The downside to the new QM web is that many of the existing pages  
 413 (such as recent and back issues of the *Memoirs of the Queensland*  
 414 *Museum* and the new *Technical Reports*) did not get relaunched (less

- 415 than 30% of pre-existing pages were ported to the new website), and  
 416 this is a work in progress to rectify this.
- 417 • Collection valuation and verification (v&v): The 08-09 valuation of the  
 418 State Collection (which increased from \$289.7 million to \$371.5 million  
 419 due mainly to the addition of about 4,000 insect types that were not  
 420 included in the original conversion of our databases to the Vernon CMS  
 421 (with a nominal value of \$80.7 million), came back to bite us in 09-10  
 422 because the increase in collection valuation for 09-10 was only \$7.9m.  
 423 Consequently, the Queensland Audit Office (QAO) and Queensland  
 424 Treasury declared they were unsatisfied with the v&v process because  
 425 of the potential value of specimens and objects potentially hiding in the  
 426 'Research Collection' not being adequately captured in our v&v  
 427 process. They are insisting on a method to recognise an earlier 'trigger  
 428 point' than the current threshold (registration and databasing into the  
 429 'State Collection', and/or publication, and/or declaring type species  
 430 etc), referred to as works in progress (or WIPs). QM is attempting to  
 431 capture annual collection costs of these WIPs to demonstrate that they  
 432 are 'immaterial' in an accounting sense (i.e. <5% of total collection  
 433 valuation), and can thus be ignored. Current nominal valuation of the  
 434 'State Collection' is \$379m.
  - 435 • Major marine collection activities included CReefs expeditions in  
 436 Queensland and WA, the Pilbara expeditions in collaboration with  
 437 WAM, Deep Downunder Expedition (ROV) to the Queensland Plateau  
 438 in the Coral Sea.
  - 439 • Major terrestrial collection activities were the Bush Blitz's in WA, NSW  
 440 and Qld., with QM being lead agencies on two expeditions (Culgoa and  
 441 Wet Tropics), and a third one (Central Qld) supposed to be currently in  
 442 progress but recently postponed due to continuous rains in the CQ  
 443 reserves (e.g. Carnarvon).
  - 444 • Major palaeontological expeditions continued in the Winton and  
 445 Eromanga regions (dinosaurs), and Mount Morgan (extinct rainforest  
 446 faunas in cave deposits), and Walker Creek (megafauna).
  - 447 • Collections stores and storage continued to be upgraded, to find  
 448 efficiencies in our current bursting storage facilities. Mollusc and  
 449 parasitology collection storage was replaced, and alcohol polydrum  
 450 storage compactus were installed in the spirit store, together providing  
 451 a 44% increase in space for these collections. A large number of fossil  
 452 type specimen cabinets were replaced, to reduce pyritisation  
 453 continuing at the Hendra offsite store, and with the entire roof at  
 454 Hendra also soon about to be replaced, a project delayed by over a  
 455 year due to changes in government tendering processes etc.
  - 456 • Impending opening of the Ecosciences Precinct at Boggo Road,  
 457 Brisbane, has reopened discussions with University of Queensland,  
 458 School of Biological Sciences, regarding the fate of the UQ entomology  
 459 collections. The move of the QDPI entomology collections from  
 460 Longpocket at Indooroopilly to Boggo Road is also imminent in 2011,  
 461 apparently, and there is apparently space for both collections at the  
 462 new facility.

## 463 Research –



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- Base staffing was 29.9 FTEs (same as 08-09). Externally funded staffing 16.8 FTEs (up from 10.9 in 08-09), across three campuses of QM (South Bank, Hendra and Townsville).
  - 27 postgraduate students were supervised (honours, masters and PhD level), although the majority with university based staff as their primary supervisors, QM staff as their secondary supervisors, and only few physically located at one of the QM campuses. Continuing issue of government ICT policy not permitting students access to the QM network using non-government computers, nor the installation of education-purchased software on government computers etc.
  - Over 5,000 person days were provided by our numerous volunteers (over 200 people in Biodiversity & Geosciences Programs alone).
  - \$1.3m won in external grants, consultancies and fees for service (~54% and ~37% of total base funding budget (\$2.4m) and total base + external funding budget (\$3.5m) respectively, for Biodiversity & Geosciences Programs (down from 59% and 44% in 08-09).
  - Major funding included 6 ARC Linkage Projects, 23 ABRS contracts and research grants, 4 US National Science Foundation grants, 1 US National Institutes of Health grant, and 2 other major grants from Australian Antarctic Division and Alfred P. Sloan Foundation.
  - Core operational (non-salary) funding from QM sources continued to drop, now below \$75,000 across whole of Biodiversity & Geosciences Programs (from a total base of \$2.4m), with increasing reliance on ephemeral external sources.
  - 57 research projects were undertaken during 09-10 (14 new projects, and 44 with >50% external funding) (compared to 60 in 08-09, 19 new, and 34 >50% externally funded).
  - Staff published 152 publications (all categories from peer-reviewed and books to conference presentations and popular) (up from 134 in 08-09)
  - 352 pages of *Memoirs of the Queensland Museum* were published in two issues (down from 962 in 08-09). Three issues of the *Technical Reports of the Queensland Museum* were published online. Internal funding for scientific publications was cut further, representing a challenge for QM, but also fewer manuscript submissions were received than previous years. QM exchanges about 600 copies of MQM with other institutions, continuing to justify its existence in economic terms. In 2010-11 the third and final collection of papers on *The Marine Fauna and Flora of Moreton Bay, Queensland* (Volume 3) is expected to be published early in 2011, and an issue on collected papers describing material collected during the Biodiversity at the Heights (BATH) IBISCA project on the Lamington National Park is expected to be published in 2011, mostly entomological papers. Trend for QM in-house scientific publications to publish on themes, such as those mentioned above, with fewer general papers being received and fewer human resources to do the desk top publishing.

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#### Information -

- Retirement of Senior Curator, Geosciences (PO4 level), Dr Susan Parfrey, with position upgraded to Head of Geosciences Program currently being recruited (Professional Officer Level 5).

- 515 • Continuation of three staff cross-appointments with University of  
 516 Queensland (Rob Adlard), Griffith University (Chris Burwell) and James  
 517 Cook University (Niel Bruce), freeing up 20% of three QM salary costs  
 518 for operations, in addition to most research staff having adjunct  
 519 appointments (with no cost savings). UQ cross-appointment to cease in  
 520 2010-11, downgraded to an adjunct appointment.
- 521 • Complete revision of the *Wildguide to Moreton Bay* is finally about to  
 522 be published, now in two volumes owing to the many new discoveries  
 523 of marine species in this region, and planning will commence soon on a  
 524 proposed *Wildguide to the Great Barrier Reef*.
- 525 • The 2010 International Year of Biodiversity was celebrated with talks  
 526 by Professor ‘Bert’ Roberts (University of Wollongong) on ‘Body and  
 527 mind: Charles Darwin, natural selection, *Homo floresiensis* (‘the  
 528 Hobbit’), and modern human evolution’, Professor Richard Fortey  
 529 (NHM London) on ‘Life: an Unauthorised Biography’, and Robyn  
 530 Williams on the ‘Many years communicating on sciences: the Science  
 531 Show’. BBC broadcaster Sir David Attenborough was awarded the  
 532 2010 Queensland Museum Medal as a champion of nature in the 2010  
 533 Year of Biodiversity. QM scientists and collection managers manned  
 534 the public galleries at QM South Bank, and a day at the Royal  
 535 Exhibition Show (‘Ekka’) during National Science Week, to showcase  
 536 science and biodiversity.
- 537 • QM seeking a major new building in the Brisbane CBD, with \$1m  
 538 funding awarded to Arts Queensland to commence a ‘revisoning’  
 539 process and to develop a project ‘scoping brief’ and subsequent  
 540 business case.
- 541 • QM underwent a major budget review by a Qld Treasury consultant in  
 542 terms of the use and adequacy of its current operations, staffing,  
 543 compliance, exhibitions etc.

544  
 545  
 546 **Organisation: South Australian Museum**  
 547 **Author: Steve Donnellan and Robert Morris**  
 548 **Date: November 2010**  
 549

550 **Collections -**

551 The collections division within the South Australian Museum has again had a  
 552 busy year developing collections, addressing backlogs and improving  
 553 collection management standards. The large number of loans to and from the  
 554 Museum attests to the continuing high levels of collections access and  
 555 research.

- 556  
 557 • Over 2,850 objects, lots and specimens were lent to 94 institutions  
 558 across the world in 2009 -10.
- 559 • As part of the development of the Biodiversity Gallery some four  
 560 thousand specimens and models have been prepared and installed in  
 561 the new Biodiversity gallery. This has been an enormous undertaking by  
 562 all divisions within the Museum.
- 563 • Collections acquisitions and digitisation continues to grow in line with the  
 564 targeted and strategic objectives set within Collections Management and

- 565 Research. Some 15,000 objects, lots and specimens have been added  
 566 to the collections and a further 34,787 records were digitised.  
 567 ● SAMA, in collaboration with the AM, has been awarded funds from the  
 568 ALA to develop systems and workflows that allow volunteers to  
 569 effectively digitize targeted fauna groups for the WWW. Our intention is  
 570 to work with all CHAFC members to ensure the methodologies  
 571 developed have currency with all institutions. The project will be  
 572 managed through CHAFC.  
 573 ● The Australian Archaeology collections have been successfully relocated  
 574 to new stores in Hindmarsh. This has allowed for improved access to the  
 575 collections and an allied increase in student and research interest.  
 576 ● Completion of the Preventive Conservation surveys and IPM programs  
 577 for Entomology and Ornithology and the treatment and improved storage  
 578 of the bark paintings collection were conservation highlights in 2009-10.  
 579 Working with ArtLab Australia, individual collection treatments and  
 580 exhibition related conservation programs have again been high on the  
 581 Museums' agenda.  
 582 ● A restructure within Science is currently underway. Three principle  
 583 research divisions, Biological Sciences, Earth Sciences and Humanities  
 584 will have overall responsibility for research direction and collections line  
 585 management. The Head of Collections will remain responsible for setting  
 586 overall collections management business, policy, strategy and KPIs.

587  
 588 **Research –**

- 589 ● \$4,708,167 external research grants awarded in 2009-10  
 590 ● 183 peer-reviewed research publications  
 591 ● 57 other research publications  
 592 ● 133 conference presentations (including abstract publication)  
 593 ● 30 research collaboration partners  
 594 ● 1996 hours contributed to Tertiary teaching by museum staff  
 595 ● 94 research outreach presentations to non-expert audiences (additional to  
 596 those presented as part of specific museum programmes)  
 597 ● School visits (booked into education-led programmes): 36,904

598  
 599 **Informatics –**

- 600 ● Delivery of collections content to the WWW is now well underway. A new  
 601 webserver has been purchased and installed. It will act as the Museum's  
 602 web portal to OZCAM and the ALA. The new SA Museum website will go  
 603 live late November/ early December 2010.  
 604 ● Vertebrate collections data was re-harvested and delivered to the AM for  
 605 loading onto OZCAM. SAMA records delivered now totals 161,000  
 606 records. With the assistance of the ALA we are developing an online  
 607 process to deliver Darwin Core data directly to our own webserver for  
 608 future live feeds.  
 609 ● Institution wide policies covering electronic information management,  
 610 storage and content delivery are currently in development.

611  
 612 **Access and Visitation –**

- 613 • Total visitation: 887,113; (808,124 on-site visits; 78,989 regional/touring  
 614 programme visits)  
 615 • Web page views: 1,549,599  
 616 • 13 temporary exhibitions

617  
 618

619 **Organisation: Tasmanian Museum and Art Gallery**

620 **Author: Cathy Young**

621 **Date:25/11/10**

622

623 **Collections –**

624

625 ***Collection Management System***

626 A departmental review has commenced of a prototype for a new collection  
 627 management system (CMS) developed over the last five years by the  
 628 previous department and the existing TMAG database. This review will be  
 629 completed by the end of 2011. At present the CMS is operating under  
 630 FileMaker Pro 5.5. Curators and technical staff have been actively consulted  
 631 and will be an important and recognised part of the review process.

632

633 ***New staff members***

634

635 The recruitment process is almost completed to employ a new Zoology  
 636 technical officer for one year commencing December 2010. This is a full time,  
 637 fixed term position. Some of the duties of this new appointment will be:  
 638 processing of Bush Blitz specimens; databasing of seamount specimens; and,  
 639 cleaning of records in the Zoology databases.

640

641 **Research –**

642

643 ***Tasmanian Bush Blitz March – June 2010***

- 644 • Seven areas surveyed, over 2000 specimens collected, around 100  
 645 new or undescribed species, almost 2000 new records.  
 646 • Groups surveyed included all core taxa required by ABRS and  
 647 institutional priorities and were as follows: vascular plants, mosses and  
 648 liverworts, fungi, mammals including bats, birds, land snails,  
 649 mygalomorphid spiders, lycosid spiders, terrestrial crustaceans,  
 650 millipedes, caddis flies, true bugs, chrysomelid beetles, geometrid  
 651 moths, butterflies, dragonflies and damselflies.  
 652 • Twenty scientists affiliated with the museum and other institutions were  
 653 involved with the survey.  
 654 • Final report submitted in June 2010.  
 655 • Databasing and curating of specimens is ongoing.

656

657

658 ***Grants***

659 ***Taxonomic Grants to be completed by June 2011***

- 660 • Taxonomic revision and descriptions of new species of *Omoptatica* and  
 661 *Lipogya* (Lepidoptera: Geometridae) using specimens collected from

- 662 the Western Australia Bush Blitz (September 2009) – Dr Cathy Young.  
 663 • Tasmanian Bush Blitz - Ten new species of Tasmanian Snails and  
 664 Taxonomic Training - Dr Kevin Bonham.  
 665 • Tasmanian Bush Blitz - Tasmanian Land Snails (Pulmonata:  
 666 Charopidae) – Dr Kevin Bonham.  
 667 • Tasmanian Bush Blitz - Description of new species and redescrptions  
 668 of species in the genus *Paropsisterna* (Coleoptera: Chrysomelidae) –  
 669 Dr David DeLittle.

670 *Databasing grants*

- 671 • Global Census of Marine Life on Seamounts – mini-grant – to upload a  
 672 quality assured dataset of several hundred southern ocean seamount  
 673 octocorals, molluscs and other invertebrates to SeamountsOnline, by  
 674 end of 2010.

675 **Australian Faunal Directory** - Provision of taxonomic and nomenclatural  
 676 treatments of Lepidoptera: Geometridae, including Ennominae Dr C. Young.

677

678 **Conferences and Seminars**

- 679 • Dr C. Young attended and presented a paper at Forum Herbulot – a  
 680 biennial conference on the Geometridae, in Florida in June 2010.  
 681 • Vertebrate Zoology staff members, Kathryn Medlock and Belinda  
 682 Bauer, attended and presented a seminar at the Museums Australia  
 683 conference in Melbourne, October 2010.

684

685

**Information -**

686

687 **Data supply to OZCAM**

688 From May 2010 – the number of specimen records has increased from 135 to  
 689 almost 10,000. These records are registered fish and bird specimens.

690

691 *Data Supplied:*

692 Ornithology 5,926

693 Ichthyology 3,553

694

695 TOTAL 9,479

696 Date supplied: 9 July 2010

697 Process included:

- 698 • Clarify mapping from TMAG fields to OZCAM  
 699 (Included preparing a number of customised fields to format data  
 700 appropriately)

- 701 • Data cleaning activities: intensive input from Belinda Bauer, the  
 702 Collection Manager, Vertebrate Zoology

703 The export was prepared and supplied as a text file.

704

705

706 **Organisation: Western Australian Museum**

707 **Author: Diana Jones**  
 708 **Date: 18 November 2010**

709

710 **Collections -**

711

712 The Museum received an outstanding insect collection containing about 1,700  
 713 jewel beetles, 500 moths and other insects donated by the family of the late  
 714 Kevin Richards, former entomologist at the WA Department of Agriculture.

715

716 A new method for the safe storage and preservation of wet specimens using  
 717 aqueous glycerol solutions instead of alcohol was trialled resulting in  
 718 improved colour and flexibility of formaldehyde fixed specimens. The method  
 719 has been used to re-house *Megamouth* from the WA Museum – Perth.

720

721 The Museum continues to integrate and rationalise the 700,000 digital images  
 722 of its collection onto its databases with a view to making the collection  
 723 available to the public on the Museum's new website. This also provides cost  
 724 effective and efficient curatorial and conservation management of the  
 725 collections.

726

727 The Marine Life of North Western Australia project funded by Woodside  
 728 enabled a further 9,367 specimens to be added to the Museum's Aquatic  
 729 Zoology database as well as historical Museum collections data from the  
 730 Kimberley region. To date, 19,000 records have been added to Aquatic  
 731 Zoology databases. Electronic records of species' distributions allows for  
 732 inclusion in national and international biodiversity initiatives through the  
 733 Australian museums' collaborative database, OZCAM, which feeds to the  
 734 international websites Global Biodiversity Information Facility (GBIF) -  
 735 <http://www.gbif.org/> and Ocean Biogeographic Information System (OBIS) -  
 736 <http://www.iobis.org/>. Electronic records of specimens also assist in tracking  
 737 specimens which contributes to efficient and effective collection management.

738

739 Another significant achievement in electronic recording of data was the  
 740 addition of approximately 10,000 Hemiptera insect specimen records to the  
 741 Entomology database.

742

743 **Research –**

744

745 Advanced global research efforts through:  
 746 70 collaborative scientific research projects, of which 23 involved international  
 747 partner agencies and institutions.

748 (Refer to the WA Museum – Around the World map, page 25.)

749

- 750 • The loan of more than 5,900 items to other institutions for scientific
- 751 research.
- 752 • Providing access to its collection by hosting nine international scholars.
- 753 • 45 field trips that took place throughout the State.
- 754 • Contributed to the management and sustainability of the State's
- 755 environment and resources development by providing expert advice
- 756 and information in response to over 3,400 requests from the

- 757 government and private sector on biodiversity and culturally significant  
 758 issues.
- 759 • Supported the training of the next generation of scientists, curators and  
 760 other experts by supervising 51 students of which 31 were post  
 761 graduate students: 18 were based in Australia and 13 were based  
 762 overseas. The Museum also plays a major role in introducing school  
 763 aged and vocational students to a variety of possible museum and  
 764 science-based careers.
  - 765 • Publishing 77 peer reviewed research publications (71 journal articles  
 766 and six book chapters).
  - 767 • Publishing 145 non-refereed reports, conference papers, popular and  
 768 other publications (32 non-refereed reports, 39 conference papers, five  
 769 popular publications and 69 unpublished reports to consultants).
  - 770 • Holding 199 local, 53 regional, 29 national and 13 international public  
 771 lectures, workshops and presentations.

772  
 773 **Achievements -**  
 774

775 The Western Australian Museum increasingly works in partnership with  
 776 museums and universities within Australia and around the world as well as the  
 777 national and international private sector and individual research sponsors.  
 778 These partnerships deliver a range of benefits to the Museum and the State.  
 779 They provide access to the WA Museum’s collections and knowledge; enable  
 780 the Museum to increase its networks, and support research work and projects  
 781 that might otherwise be out of reach due to funding and staff constraints. The  
 782 work undertaken through partnerships helps inform today’s scientific thinking  
 783 both within Australia and abroad in vital areas including conservation, climate  
 784 change, biodiversity and sustainability.

785  
 786 Over the past year, the Museum was involved in 78 research projects in a  
 787 variety of disciplines, of which 70 involved partner agencies and institutions,  
 788 including 23 international collaborators. Many of the 45 field trips undertaken  
 789 by Museum staff during 2009–10 were conducted in partnership with other  
 790 organisations.

791  
 792 Major field trips this year included:

- 793 • Marine Biodiversity Survey of Adele Island and Montgomery Reef in  
 794 the Kimberley.
- 795 • Surveys of dinosaur foot prints in the Kimberley.
- 796 • A study of a population of waders and shorebirds in the North West.
- 797 • A study of the diversity and health of cockatoos in the South West for  
 798 evidence of feeding, breeding and roosting sites.
- 799 • Surveys of frogs, reptiles and plants at Bachsten Creek, the Prince  
 800 Regent River and the Mitchell Plateau as a continuation of the *Alcoa*  
 801 *Frog Watch* work in the Kimberley.
- 802 • Exploration of the Cretaceous-Jurassic strata in Emu Hill creek near  
 803 Badgingarra.

804  
 805 In 2009–10 major state, national and international research partnership  
 806 projects included:

- 807 • The Woodside Collection (Kimberley) Project Woodside 4 funded by  
808 Woodside Energy Ltd; the Western Australian Marine Science  
809 Institution (WAMSI) project studying the deep water communities of  
810 Ningaloo Reef; the Ningaloo lagoon filter feeding communities in  
811 collaboration with Murdoch University and CReefs and Ningaloo deep  
812 water species with CSIRO. These projects have forged collaborations  
813 across Australian and international museums, universities, and marine  
814 organisations. This has resulted in the creation of new marine  
815 collections from both the remote Kimberley, an area with high  
816 conservation, social and economic value, and from Ningaloo Reef, an  
817 area that is being evaluated for World Heritage Listing.
- 818 • The WA Marine Bioresources Library (WAMBL) funded by the WAMSI  
819 is enabling registration of frozen sponge specimens from the WA  
820 Museum collections into the inaugural WA Bioresources Library,  
821 making this material available for biodiscovery research.
- 822 • Chevron-funded collaborative work with the Australian arm of the US  
823 company URS Corporation to survey fish communities at the mouth of  
824 the Ashburton River, near Onslow. This fieldwork added fish  
825 specimens to the collections from a previously poorly known area of  
826 Western Australia.
- 827 • In collaboration with the Tyrell Museum, Canada and the University of  
828 Alberta, Canada, palaeontologists are studying the ontogeny and life  
829 history of the *Cardabiodon ricki*, the largest known shark from the mid-  
830 Cretaceous period. The study of these mid-Cretaceous fossil sharks is  
831 paramount to our understanding of the evolution of the lamniform  
832 sharks, a group that includes modern species such as the great white  
833 shark and the Megamouth shark.
- 834 • In collaboration with the American Museum of Natural History, Museum  
835 scientists are researching spiders belonging to the group Oonopidae.
- 836 • Studies of the systematics of Pseudoscorpions are being carried out in  
837 collaboration with the University of Connecticut.
- 838 • A study on the biogeography of calcareous and recent lithistid sponges  
839 of Western Australia in two collaborations with the Federal University of  
840 Rio de Janeiro, Brazil and the Institute of Palaeobiology, Polish  
841 Academy of Sciences, Poland. These fauna have not previously been  
842 examined in the Eastern Indian Ocean.

843  
844 Funding from a major mining company will provide a new Molecular  
845 Systematics Unit at the Welshpool site. The funds will allow construction of  
846 the facility, laboratory equipment and a senior staff member for three years.  
847 The facility will be completed by the end of 2011.

848

849

#### Information -

850

851 The WA Museum's work in describing new genera and species is highly  
852 significant in international terms. In 2009–10 Museum scientists described 20  
853 new animal genera and 114 new animal species. Ninety new animal species  
854 and eight new fossil holotypes were added to the collection. The Museum  
855 added more than 25,000 wet items and over 23,000 dry items to its storage



856 facilities and more than 2,000 artefacts and over 24,000 cultural items were  
857 registered into the collection this year.

858

859 In order to mark the 150th anniversary of the publication of *The Origin of the*  
860 *Species* and the 200th anniversary of Darwin's birth the Museum led a team  
861 of Australian researchers in naming a number of new species after Charles  
862 Darwin, the founder of the theory of natural selection. This culminated in a  
863 special edition of the *Records of the Western Australian Museum* that  
864 includes 16 newly named species from Australia, 11 of which are named  
865 *darwini*.

866

867 As part of its participation in 2010 International Year of Biodiversity, the  
868 Museum launched *The Harry Butler lecture series: In the Wild West*, under  
869 the patronage of renowned naturalist Harry Butler and the Chief Scientist of  
870 Western Australia, Professor Lyn Beazley. More than 2,000 people attended  
871 the lecture series between February and June across both regional and  
872 metropolitan sites. The lectures were delivered throughout the year by WA  
873 Museum scientists and associates, Dr Butler and Professor Beazley. The  
874 series will continue into the coming year.

875

876 The Museum also produced and distributed 13 new books and monographs  
877 for national distribution to general and specialist readers, libraries and young  
878 readers including:

- 879 • *Australian Minescapes* by Edward Burtynsky
- 880 • *Field Guide to Marine Fishes* by Gerald R Allen
- 881 • *Field Guide to the Frogs of Western Australia* by M J Tyler and P  
882 Doughty
- 883 • *Field Guide to Sea Stingers* by Loisetette M Marsh and Shirley M Slack-  
884 Smith
- 885 • *Pinnacles* by Ken McNamara
- 886 • *Stromatolites* by Ken McNamara
- 887 • *Australia's Meteorite Craters* by Alex Bevan and Ken McNamara
- 888 • *In Old Kalgoorlie* by R Pascoe and F Thomson
- 889 • *HMAS Sydney* edited by M McCarthy
- 890 • *The Short, Tragic Life of Leo the Marsupial Lion* by John Long
- 891 • *Shipwreck at Madman's Corner* by M Lefroy and P Baker
- 892 • *A Guide to the Ants of South-Western Australia*, Supplement 76
- 893 • *Marine Biodiversity Survey of Mermaid Reef (Rowley Shoals), Scott*  
894 *and Seringapatam Reef, Western Australia* Supplement 77

895

896 [WAM staff publication list also supplied but not reproduced here]

<b>Summary of new &amp; outstanding Actions from 2010 AGM</b>		
<b>26/08/10</b> <b>Item 2</b>	Chair of CHAFC to correspond with the new Director of QVMAG (Richard Mulvaney), once he commences, to nominate an appropriate staff member as QVMAG representative on CHAFC	<b>Action: JH</b>
<b>26/08/10</b> <b>Item 8</b>	PB to check with AQIS regarding the activity (or otherwise) of their biological consultative committee and CHAFC's representation on it.	<b>Action: PB trying to contact AQIS.</b>
<b>7/05/10</b> <b>Item 5</b>	Unresolved issues with Bush Blitz contracts/ uncertainties requiring resolution with ABRS. JH to discuss these with Director of ABRS at the December Advisory Committee meeting.	<b>Action: JH</b>
<b>7/05/10</b> <b>Item 6</b>	Date of establishment of CHAFC was 1993. CHAFC website to be updated accordingly.	<b>Action: FCIG (Beth)</b>
<b>7/05/10</b> <b>Item 8</b>	CHAFC members to review copyright disclaimer on OZCAM website and advise Secretary, who will collate and advise FCIG accordingly.	<b>Action. CHAFC Members and SV (by end of January 2010).</b>
<b>7/05/10</b> <b>Item 12a</b>	Once approved by members the minutes of the CHAFC AGM to be circulated to CAMD.	<b>Action: SV COMPLETED</b>
<b>7/05/10</b> <b>Item 12b</b>	Minor corrections proposed to OZCAM MOU. Chair of CHAFC to send covering letter with new MOU to relevant CEOs/ Directors for signing, together with a copy of the CHAFC AGM.	<b>Action: JH</b>
<b>2010 AGM</b> <b>Item 3A</b>	Chair to complete appropriate form and submit this with statement to the ACT Office of Regulatory Services. Completed (DY to post documents from Canberra).	<b>Action: JH &amp; DY</b>

<b>Item 3B</b>	Shopping around for a better deal for auditor's costs & public liability insurance; and checking with ACT Incorporations Act & website for any ongoing annual fees associated with Incorporation	<b>Action: SV</b>
<b>Item 4</b>	Chair to notify ACT Office of Regulatory Services of current CHAFC executive committee.	<b>Action: JH COMPLETE</b>
<b>Item 5A</b>	Members to send reports for 09-10 to Secretary for incorporation into Minutes of AGM	<b>Action: CHAFC members, SV to collate</b>
<b>Item 5B</b>	CHAFC Capability statement. Members to send organization structures/ staffing to JH to assemble into a draft document	<b>Action: CHAFC members to send to JH</b>
<b>Item 6</b>	CHAFC to request FCIG to clarify, and if necessary obtain advice from ALA regarding appropriate creative commons licenses to reduce risk of commercial use of institutional specimen data. ALA has used the Creative Commons with Attribution license, whereas some institutions might wish to supply data to ALA with CC Attribution Non-commercial licenses.	<b>Action: FCIG (Ely)</b>
<b>Item 7A</b>	Scheduling of trips. Request that proposed schedule for Bush Blitz trips be made available again to members	<b>Action: (ABRS) BB team to forward BB schedule to Secretary or to place it on BB website</b>
<b>Item 7B</b>	Reporting proforma, databasing and curation funds. Chair to meet with Director of ABRS to discuss possible models, and report back to CHAFC	<b>Action: JH &amp; PB to meet (or teleconference) with Director ABRS to discuss and resolve these last few outstanding issues (see also Item 7C above)</b>

<b>Item 9</b>	ALA & CHAFC Rapid digitization proposal (AM & SAMA). Chair to contact Chair of CHAH to see whether they have an administration fee. Chair to subsequently contact Peter Doherty at ALA to emend the costings of the draft proposal to include a CHAFC fee.	<b>Actions: JH to contract CHAH and ALA.</b> <b>ALA Contract done.</b>
<b>Item 10</b>	'Cinderella collections'. JH to inform CHAFC of any further progress with the fate of the UQIC.	<b>Action: JH to inform CHAFC of forthcoming developments with UQIC</b>
<b>Item 11</b>	Collection auditing, verification and valuation issues. PB requested any auditing procedures from other CHAFC members.	<b>Action: CHAFC members to send any relevant documentation to PB</b>
<b>Item 12</b>	National Tissue Collection gap analysis through consultancy	<b>Actions: LJ to explore concept further.</b> <b>FCIG to ensure that if a "tissue sample field" is included in individual museum databases then these should be exported to OZCAM and be displayed</b>
<b>Item 12B</b>	Impacts of Nagoya Convention on Biological Resources on access to and movements of faunal collections worldwide	<b>Action: JH to meet with Ben Phillips' team at Dept of Environment</b>
<b>Item 13</b>	Values of Australia's biological collections	<b>Action: CHAFC members urged to go online and complete questionnaire.</b>

<b>ITEM 14</b>	Developing a CHAFC logo to replace the “flower” logo on the website.	<b>Action: SV to draft some logos (symbol (e.g. urchin) + microtext “CHAFC” underneath it, and circulate to members of CHAFC and FCIG for their input) COMPLETE</b>
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