

Collections at Risk: Why you need a comprehensive collection care plan

**Collections Care Network of the
American Institute for Conservation of Historic and Artistic Works**

Copyright © 2013

Session supported by:



About AIC

The American Institute for Conservation of Historic and Artistic Works (AIC) is the national membership organization supporting conservation professionals in preserving cultural heritage by establishing and upholding professional standards, promoting research and publications, providing educational opportunities, and fostering the exchange of knowledge among conservators, allied professionals, and the public.

About CCN

- The Collection Care Network (CCN) is a network within AIC for all members who are interested in collection care
- Membership in AIC is open to everyone
- CCN is the voice for preventive care within AIC

Meet Your Presenters

- Robert Waller
President and Senior Risk Analyst
Protect Heritage Corp.
- Lisa Elkin
Chief Registrar and Director of Conservation
American Museum of Natural History

A sampling of early CCN initiatives

- Collection care staff survey report
- Reaching out to related organizations
- Special session for SPNHC 2012
- Liaisons between organizations
- STASH
- AIC 2014 Sustainability and Preventive Conservation

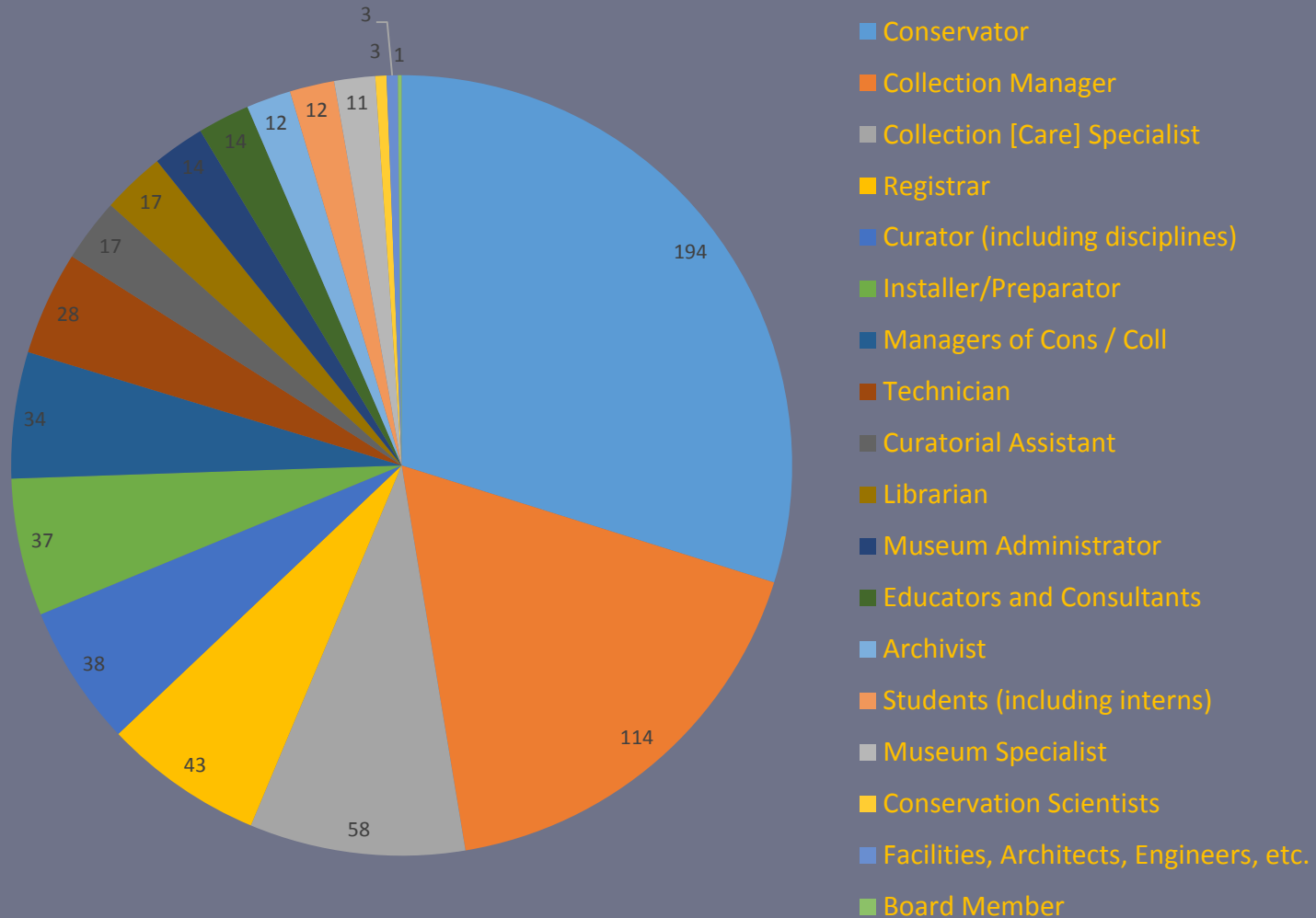
A sampling of early CCN initiatives

- **Collection care staff survey report**
- Reaching out to related organizations
- Special session for SPNHC 2012
- Liaisons between organizations
- STASH
- AIC 2014 Sustainability and Preventive Conservation

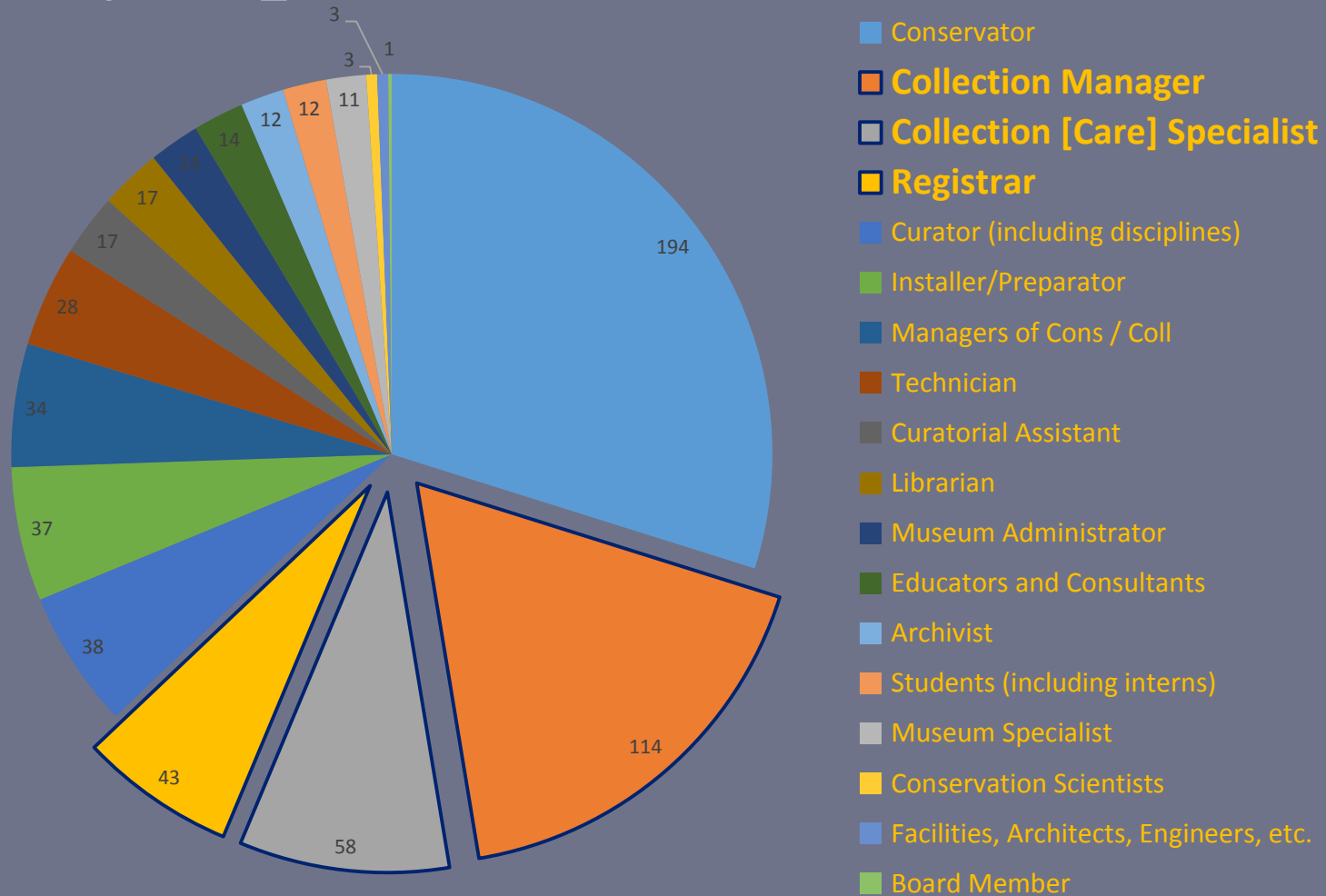
Collection care staff survey report – *referred from:*



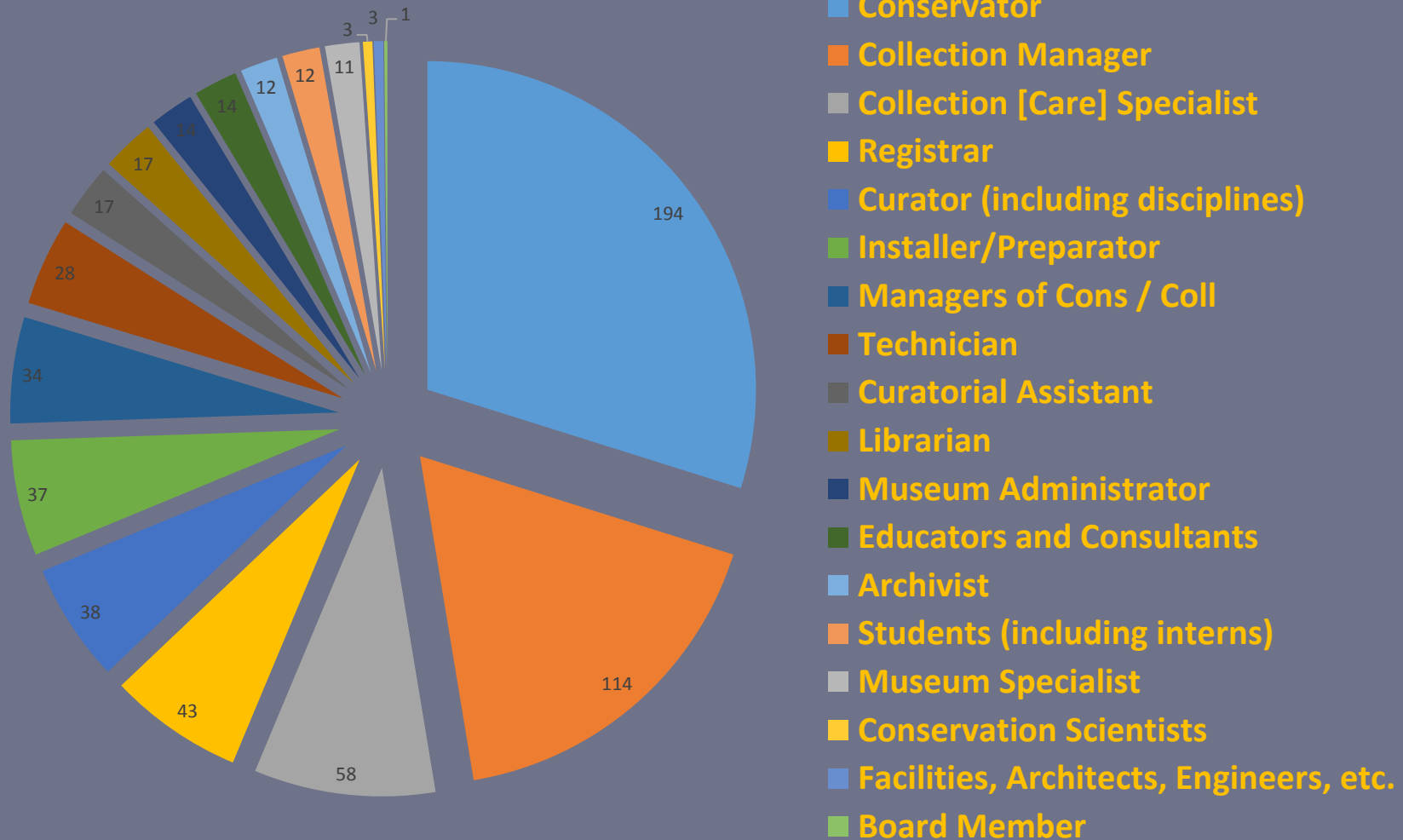
Collection care staff survey report – *we heard from:*



Collection care staff survey report – *we heard from:*



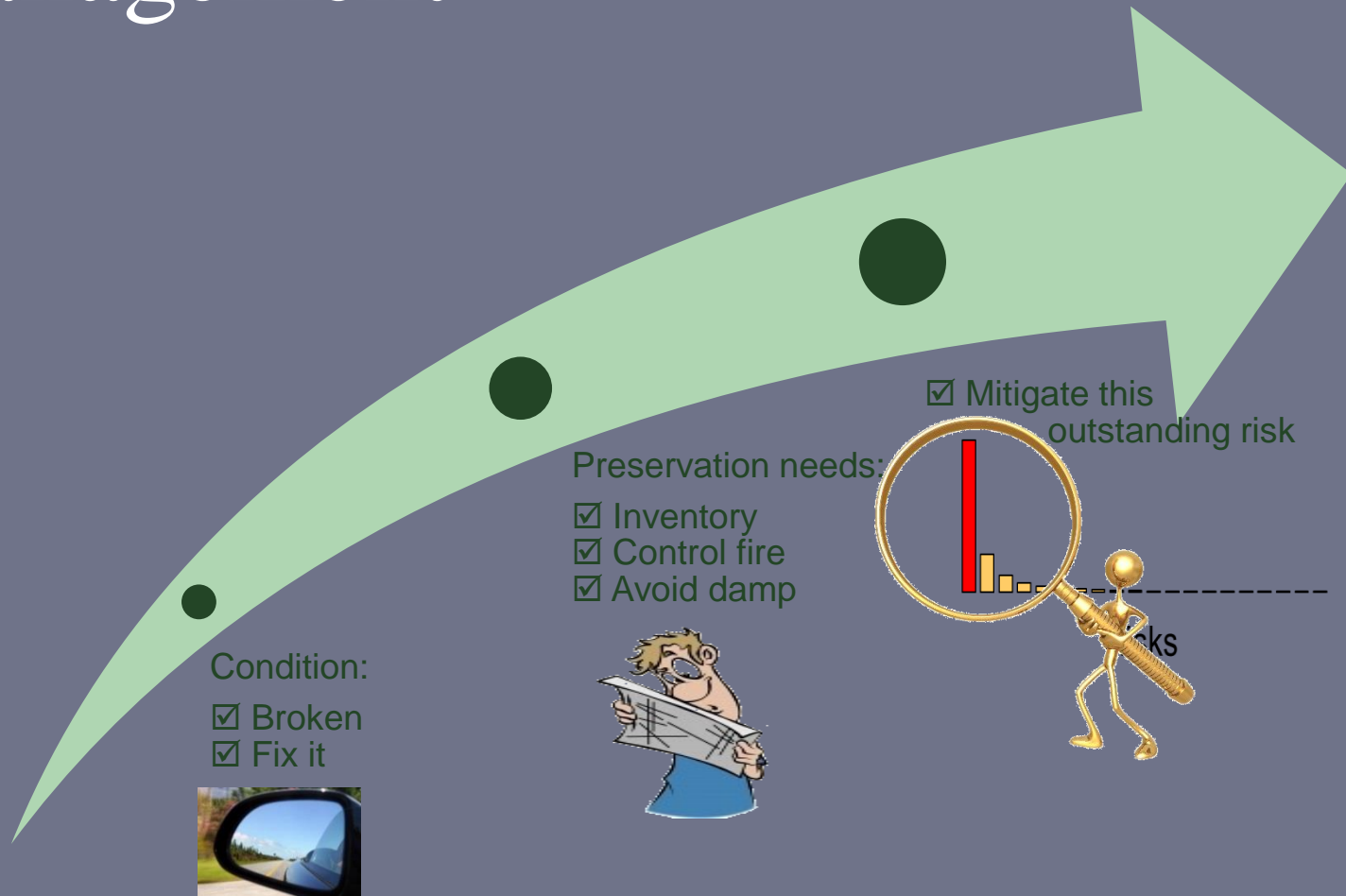
Collection care staff survey report – *we heard from:*



Collection care staff survey report – *training needed:*



Evolution of preservation management



What do I think the chances are?

- Coin toss – heads or tails?



- Unlikely
- Probable
- Fair chance
- Significant
- Highly probable

<i>Unlikely</i>	<i>Probable</i>	<i>Fair chance</i>	<i>Significant</i>	<i>Highly probable</i>

Unlikely

“**unlikely** that an accidental surface or subsurface oil spill would occur from the proposed activities.”

BP's 52-page exploration plan for the
Deepwater Horizon Well

Filed with the federal Minerals Management
Service



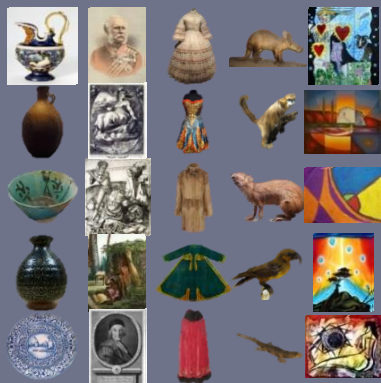
Significant

"due to the distance to shore (48 miles) and the response capabilities that would be implemented, no **significant** adverse impacts are expected."



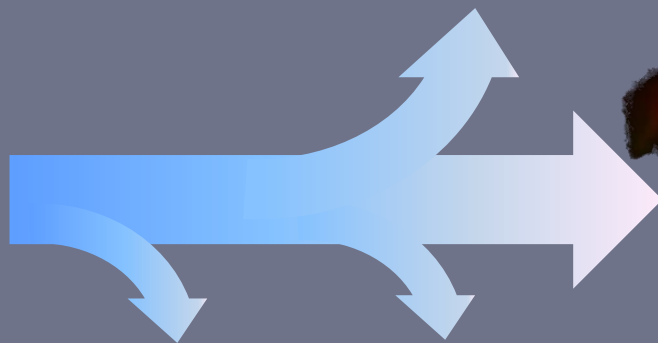


2015

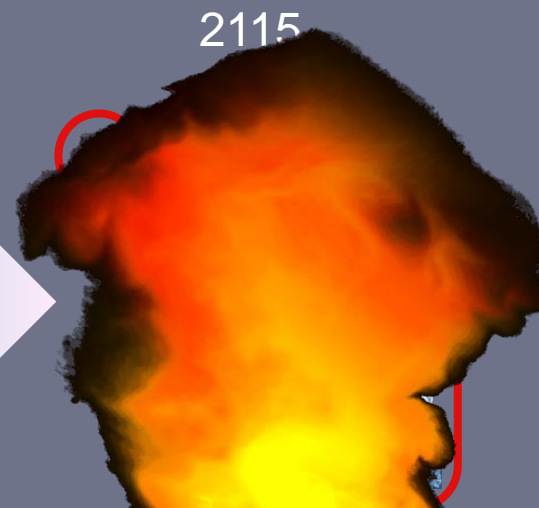


2015

The Goal



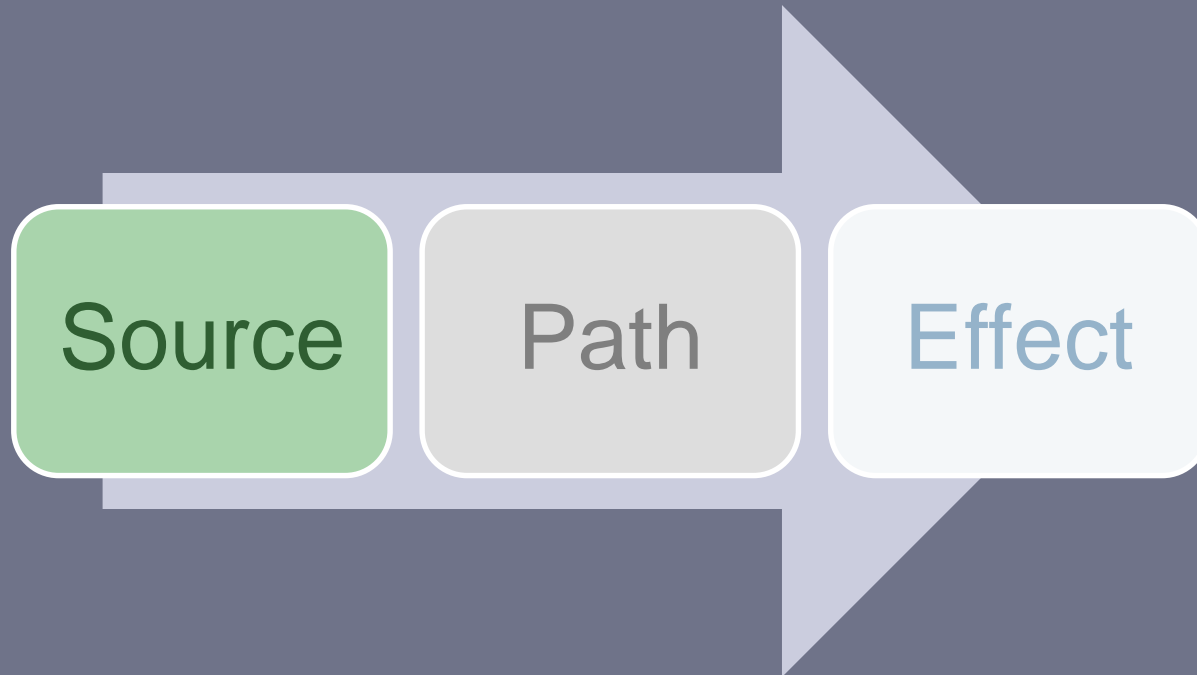
The Risks



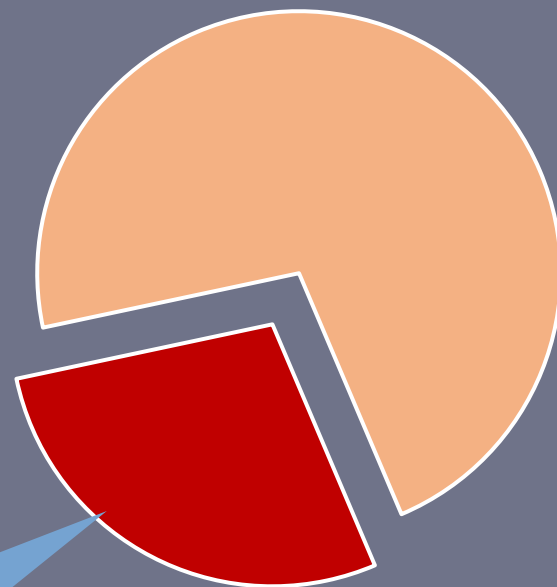
2015

2015

Define risks clearly

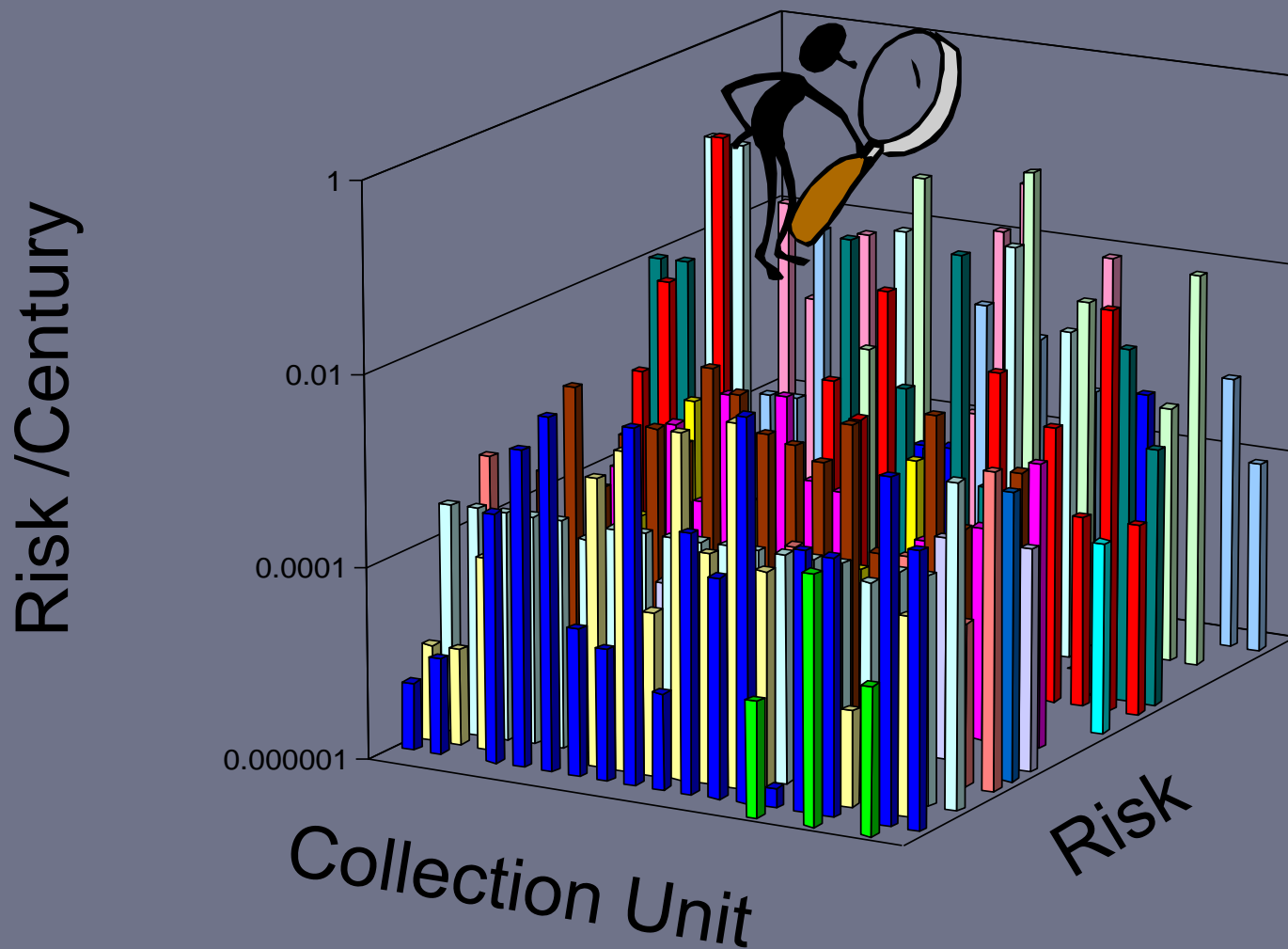


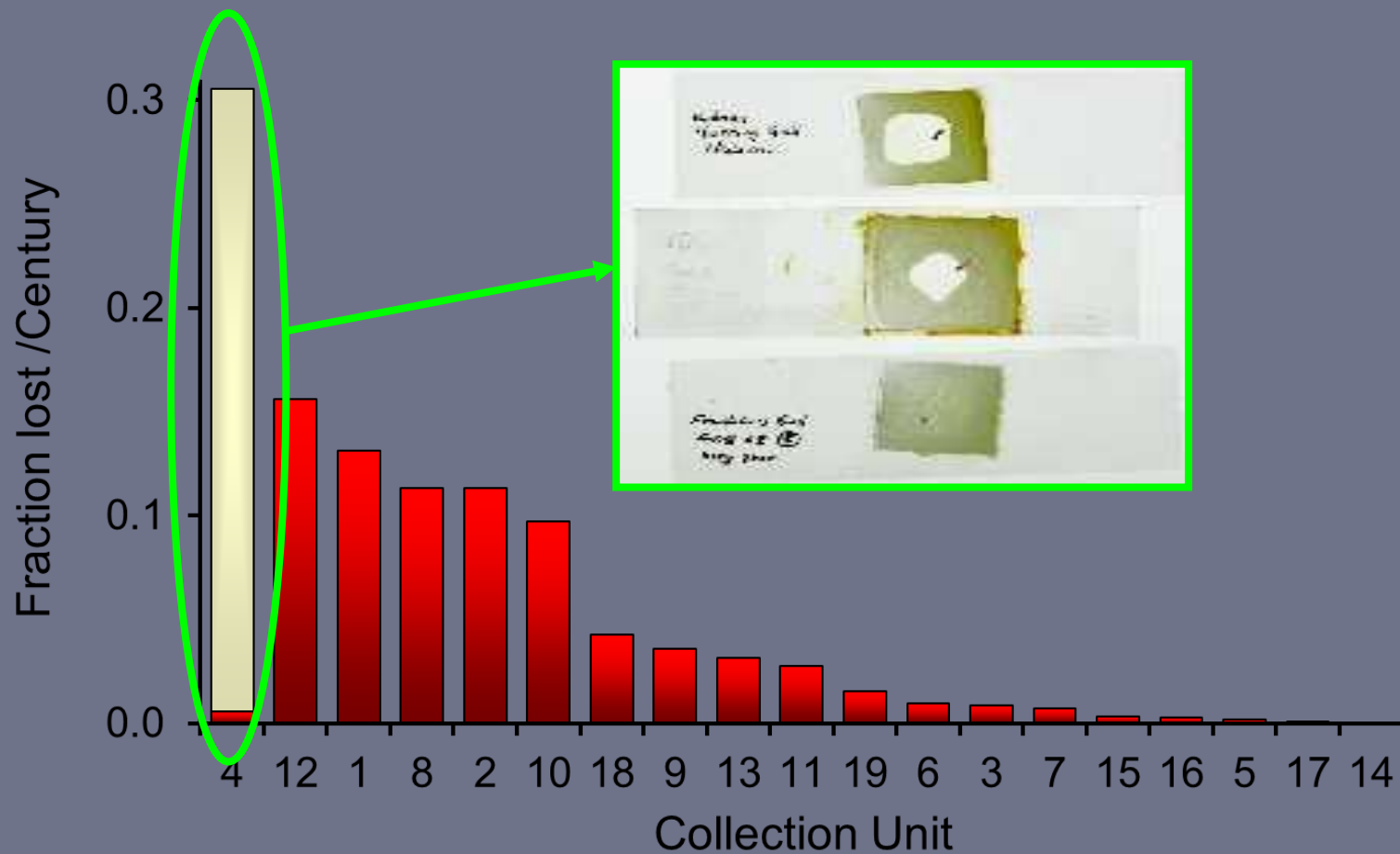
Magnitude of Risk
MR



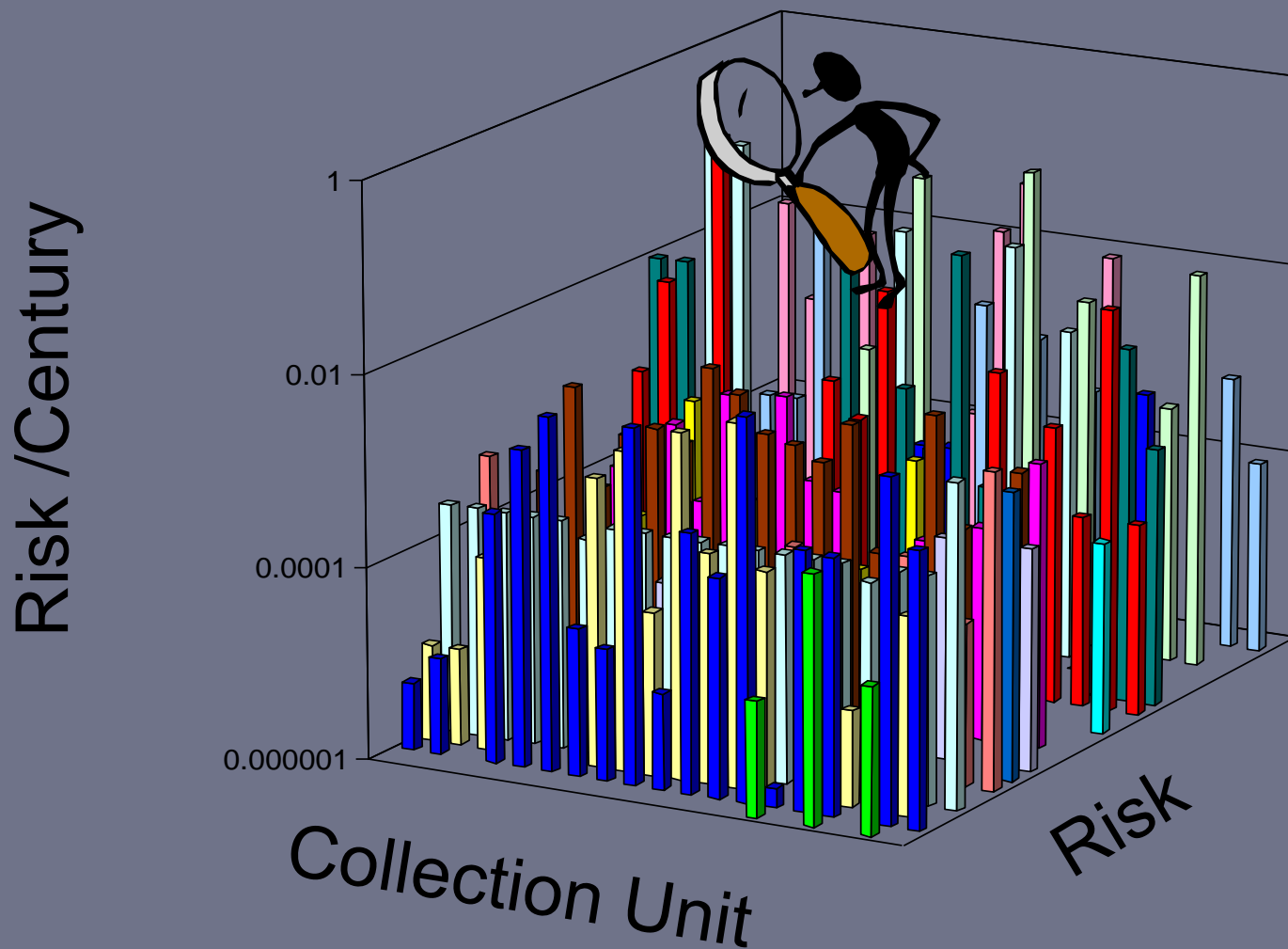
Part of collection value
expected to be lost

The Forest

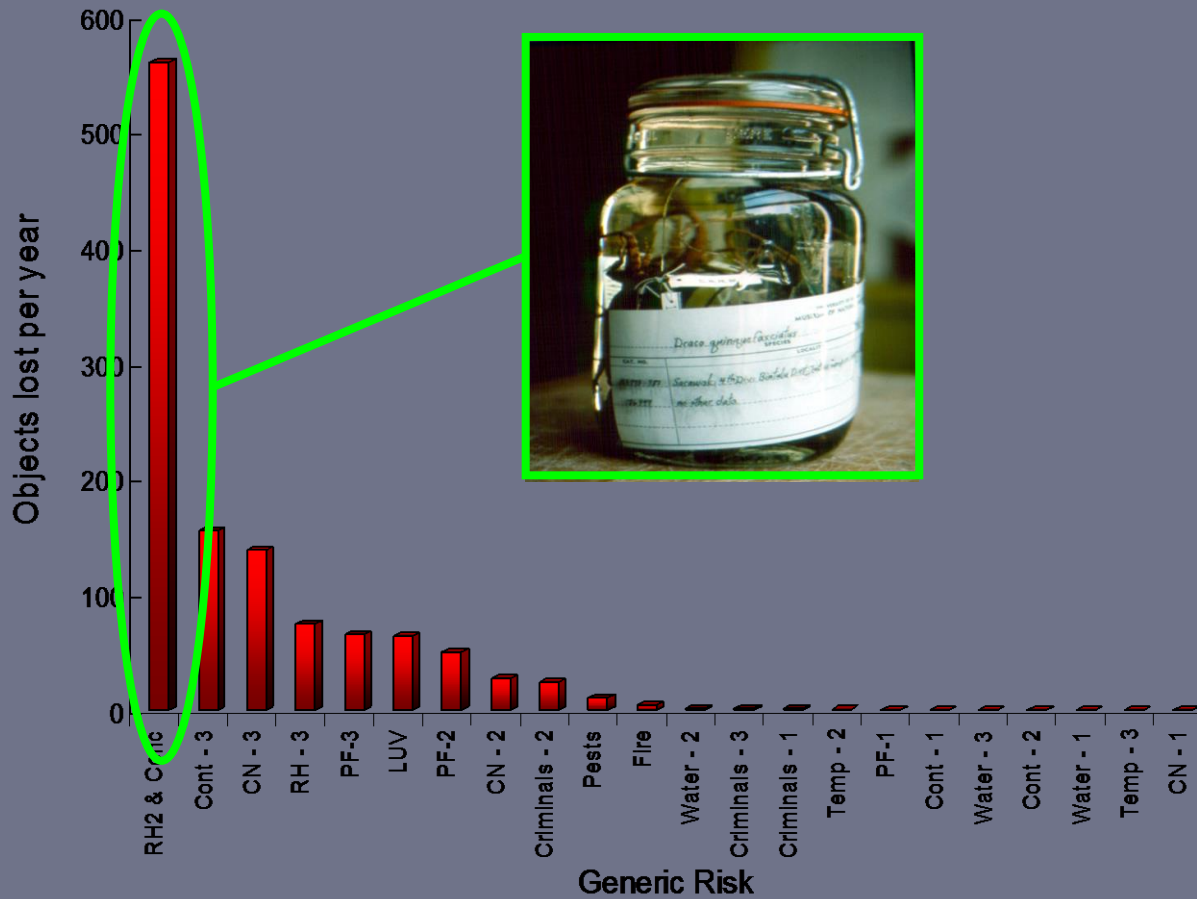




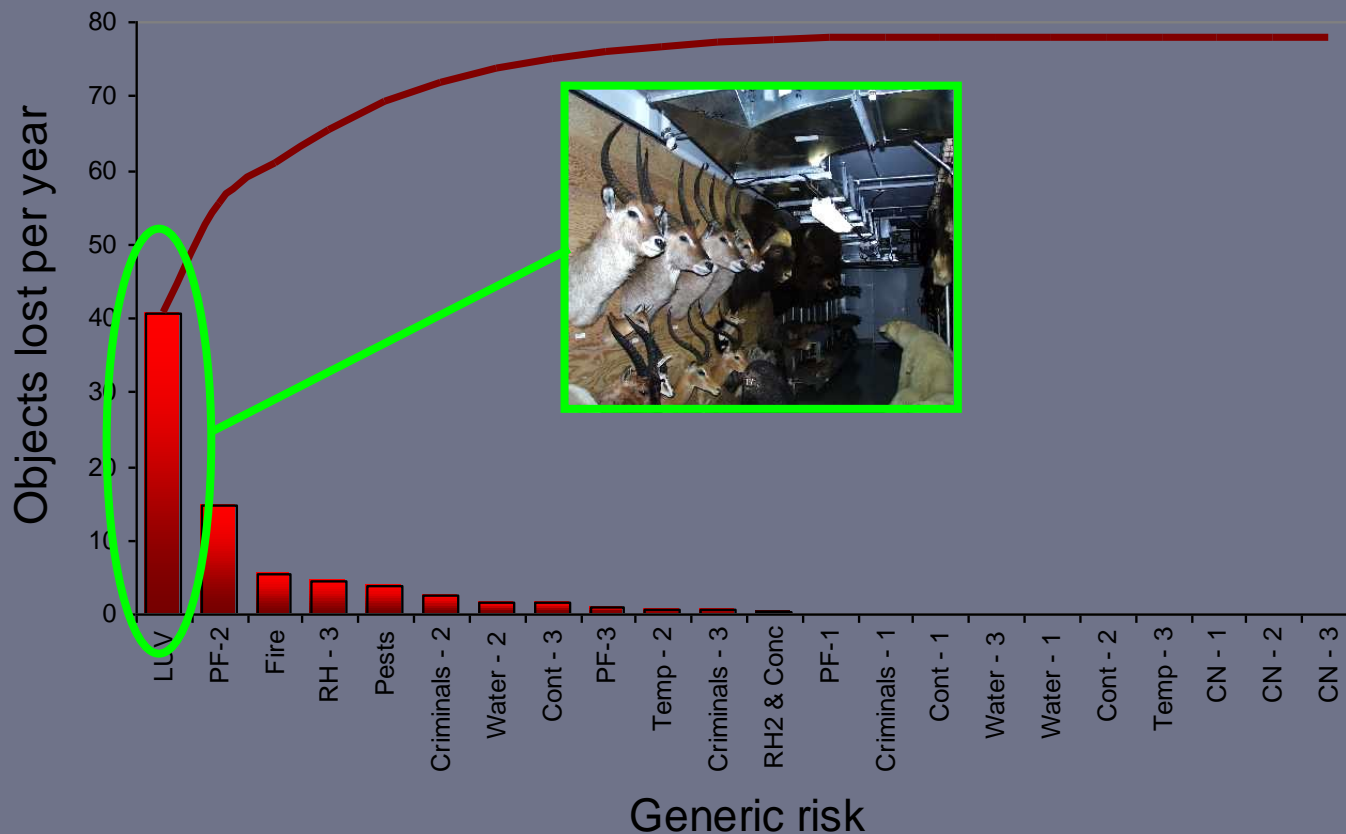
The Forest



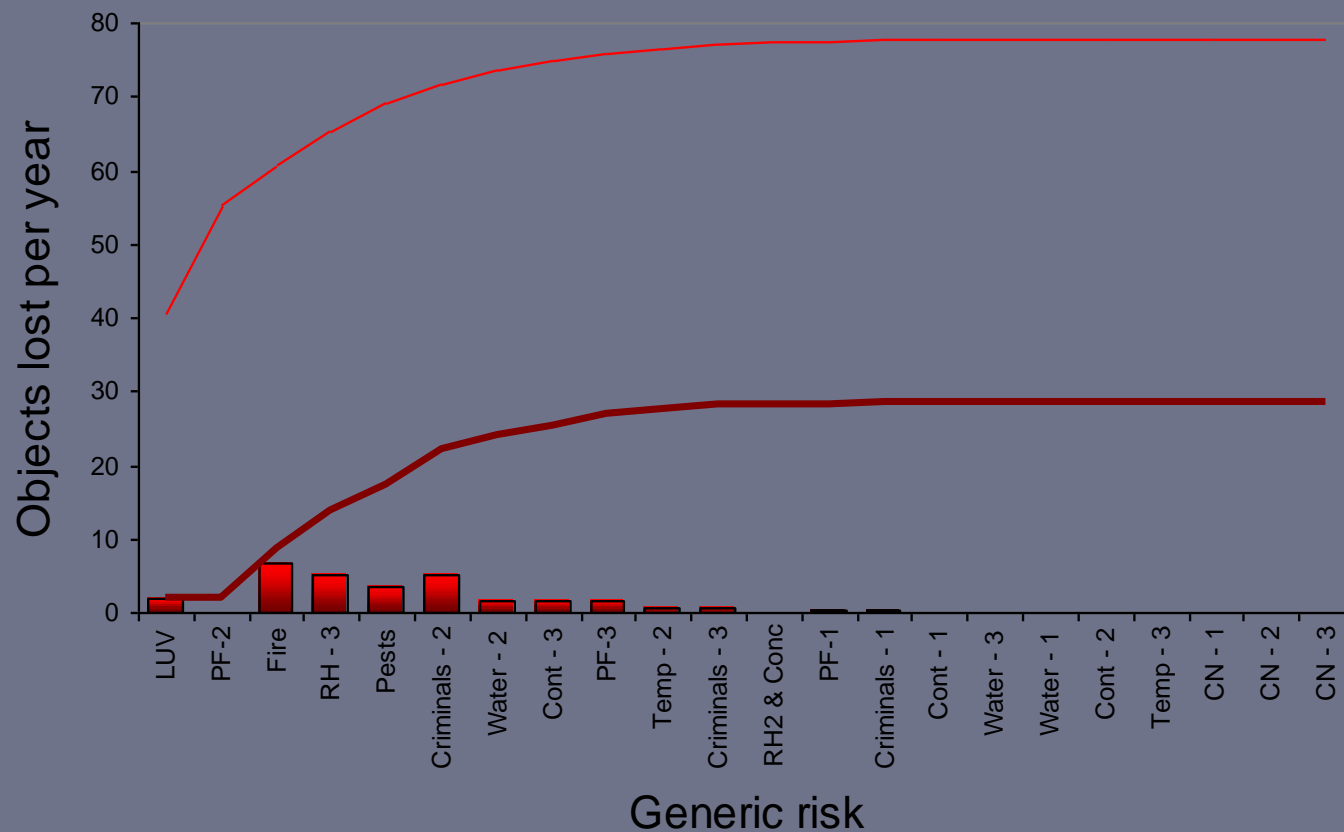
1998 Total Risk to CMN Collection



1998 Facilities management share of risks



2008 Projected Facilities share of risks



Measure Risk Then Plan Preservation

Lisa Elkin

American Museum of Natural History

New York Times, April 2, 2013

'Pedestrians struck by cars are most often hit while in the crosswalk, with the signal on their side.'



New York Times, April 16, 2010

'Deadliest for Walkers: Male Drivers, Left Turns'



Physical Forces Type 1: Pedestrian hit by moving vehicle

Preservation Strategies

- Look both ways; even with the 'WALK' sign
- Stay alert - Don't text while crossing
- Use sidewalks to the right of moving traffic
- Don't jay walk
- Stay away from left-turning men



Standards Regarding Collections Stewardship

- *AAM: 'Regular assessment of, and planning for collection needs (development, conservation, risk management, etc.) takes place'*
- *U.S. National Park Service: 'Each Park and Center has identified threats to the security and protection of its museum collection'*
- *Museums Australia: 'All current and potential threats to the collection are identified through regular risk assessments'*



Museum Risk Management

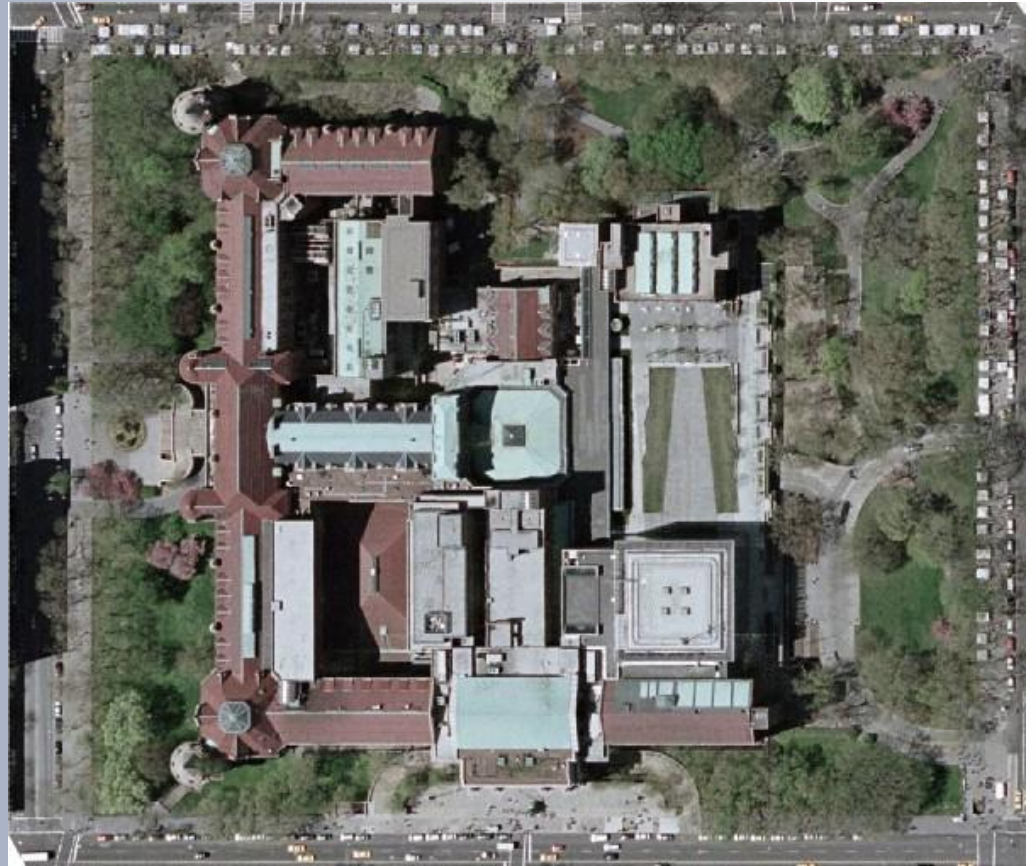
Everyone Else is Doin' It!

- Property Risk
- Income Risk
- Liability Risk
- Health and Safety
- Reputation
- Governance and
Fiduciary Risks

Museum Risk Management

Everyone Else is Doin' It!

- Property Risk
- Income Risk
- Liability Risk
- Health and Safety
- Reputation
- Governance and Fiduciary Risks



Collections Risk Management

- *Framework for Preventive Conservation, (Michalski, 1990)*
- *Cultural Property Risk Analysis Model (Waller, 2003)*
- *Collection Risk Management – The Next Frontier (Brokerhoff, 2006)*

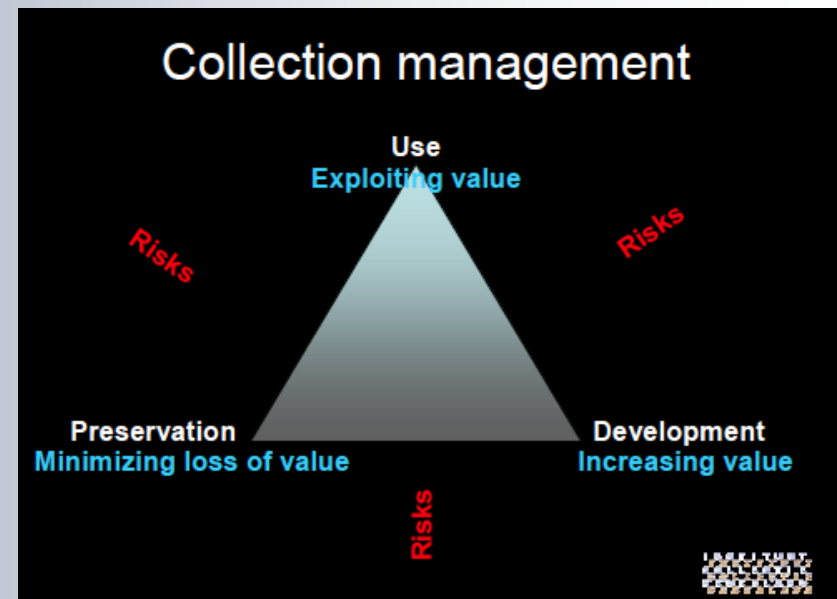
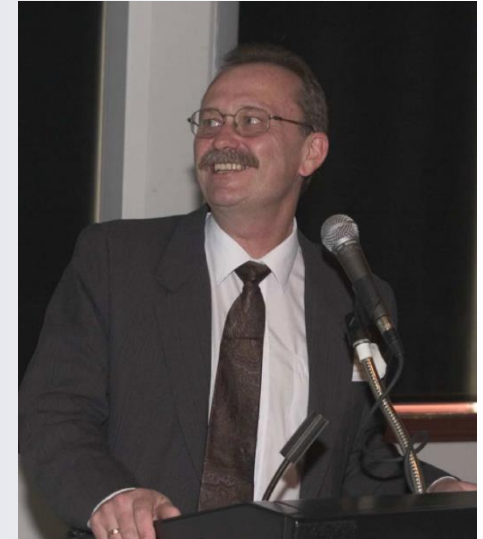


Table 1. The Nine Agents of Deterioration

Agent of Deterioration	Risks of the Agent (Form of loss or damage, and the vulnerable collections)		
Direct physical forces e.g., shock, vibration, abrasion, and gravity	Breakage, distortion, puncture, dents, scratches, abrasion All artefacts.		and government.
Thieves, vandals, displacers i.e. unauthorized human access and removal. 1 Intentional 2 Unintentional	1 Total loss, unless recovered. All artefacts, but especially valuable, and portable artefacts. Disfigurement, especially of popular or symbolic artefacts. 2 Loss or misplacement. All artefacts.	Professional and amateur criminals. General public. Museum staff. Highly visible precious artefacts.	Security. Collection management. Curators and researchers. Local police.
Fire	Total destruction with no recovery. Scorching. Smoke damage. Collateral water damage. All artefacts.	Exhibition installation. Faulty electrical, lighting systems. Arson. Careless smoking. Adjacent buildings.	Security (fire). All museum staff for detection. Local fire service. Conservation*
Water	Efflorescence or tide marks in porous materials. Swelling of organic materials. Corrosion of metals. Dissolution of glue. Delamination, tenting, buckling of artefacts with layered components. Loosening, fracture, corrosion of artefacts with joined components. Shrinkage of tightly woven textiles or canvases.	Floods. Storms. Faulty roofs. Internal faulty water and sewage connections. External faulty water and sewage connections. Wet pipe fire suppression systems.	Conservation.* Emergency preparedness, museum and government. All museum staff for detection, and for emergency response. Building cleaning services.
Pests 1 Insects 2 Vermin, birds, other animals 3 Mould, bacteria (see Incorrect Relative Humidity: damp)	1 Consumption, perforation, cuts, tunnels. Excreta that destroys, weakens, disfigures, or etches materials, especially furs, feathers, skins, insect collections, textiles, paper, and wood. 2 Consumption of organic materials, displacement of smaller items. Fouling with faeces and urine. Perforation, fouling of inorganic materials if they present an obstacle to reaching the organic material.	Surrounding landscape. Vegetation habitats near building perimeter. Garbage habitats. Incoming building materials. Incoming artefacts. Incoming staff, visitors. Spilled foods.	Conservation.* Building operations. Food services. Exhibit design. All museum staff. External pest control companies. External biologists for identification.

Collections Risk Management

- *Framework for Preventive Conservation*, (Michalski, 1990)
- ***Cultural Property Risk Analysis Model*** (Waller, 2003)
- Collection Risk Management – The Next Frontier (Brokerhoff, 2006)



Collections Risk Management

- *Framework for Preventive Conservation,* (Michalski, 1990)
- *Cultural Property Risk Analysis Model* (Waller, 2003)
- ***Collection Risk Management – The Next Frontier*** (Brokerhoff, 2006)

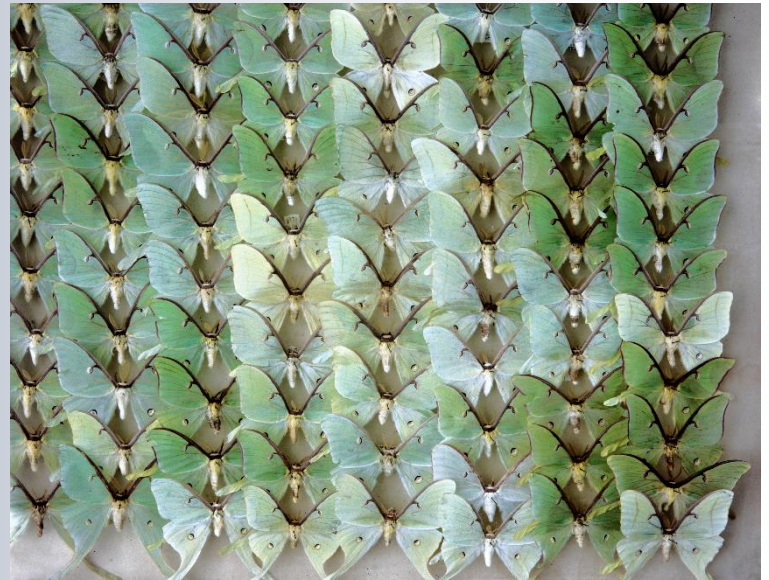


'I fear that we have not been looking at the big picture in choosing best practice solutions to improve our situation as opposed to the tougher course of action: Risk Assessment.'

Challenges:

Choosing the Best Methodology

- Many methodologies to choose from:
 - Waller, CPRAM
 - National Park Service
 - CCI/Michalski (rank order approach)
- Must rely on collection of hard data, experience of staff & research in the field
- Must be applied consistently
- Must be systematic and comprehensive!



Challenges - It's hard!

- Gain Support from Partners
 - Management
 - Collections
 - Facilities/Operations
- Educate Staff
- Make sure you have the right tools



Challenges - Embrace your Risks!

- Museums must manage risks
- Eliminating and/or avoiding risk is not always possible




Benefits of the Process

- **Teamwork at its Best**
 - Provides a vehicle for staff buy in
 - Shared Responsibility
 - Prevents competition
- **Extraordinary Opportunity for Data Capture**



Benefits of the Process


- Teamwork at its Best
 - Provides a vehicle for staff buy in
 - Shared Responsibility
 - Prevents competition
- **Extraordinary Opportunity for Data Capture**



LOG OUT

AMERICAN MUSEUM OF NATURAL HISTORY
Scientific Collections Risk Evaluation

SCoRE Application Home



The Scientific Collections Risk Evaluation (SCoRE) database provides a platform for organization and analysis of large sets of risk data in a number of different ways and allows the flexibility needed to generate reports according to various audiences and demands. Risk analysis data can be entered according to location, risk type, or administrative unit as well as through notes fields to document current procedures, practices and events. Data can be viewed by collection unit, building, floor, specific risk, etc, making data organization more efficient and searchable. Additionally, the SCoRE software has the ability to export processed data into Excel readable formats for further analysis allowing the user to generate customized charts and graphs depending upon the audience – collections staff, facilities/operations staff or museum administration. The application enables facility management and collection preservation planning efforts to become united and clearly focused on issues of highest priority.

Reports needed to prioritize collection needs can be generated and used as an aid to determine how to most effectively plan strategically for collections preservation. All summary data can be presented by material type, department/division or more comprehensive museum-wide reports in various formats including risk matrices and bar charts. Examples of the types of reports generated include:

- [Home](#)
- Collection Data**
 - [Data by Collection Unit](#)
 - [Data by Location](#)
 - [Risk Estimation Logic Form](#)
- Generate Reports**
- Administrative Tools**
 - Manage**
 - [Logins](#)
 - [Division Names](#)
 - [Department Names](#)
 - [Collection Unit Names](#)

Summary

- Collection Risk Management is not only a skill, it's an attitude. Carry it with you.
- Get started: Soon is better than never. There's a lot of support out there.
- Stop fighting fires and muddling through!
- Begin to think in terms of value lost.
- Look at the bigger picture – take a step back.



A sampling of early CCN initiatives

- Collection care staff survey report
- Reaching out to related organizations
- Special session for SPNHC 2012
- Liaisons between organizations
- STASH
- AIC 2014 Sustainability and Preventive Conservation

A sampling of early CCN initiatives

- Collection care staff survey report
- **Reaching out to related organizations**
- Special session for SPNHC 2012
- Liaisons between organizations
- STASH
- AIC 2014 Sustainability and Preventive Conservation

Reaching out ... in 2013



A sampling of early CCN initiatives

- Collection care staff survey report
- Reaching out to related organizations
- **Special session for SPNHC 2012**
- Liaisons between organizations
- STASH
- AIC 2014 Sustainability and Preventive Conservation

Special SPNHC 2012 Session on Preventive Conservation



Special Issue: Preventive Conservation

Preface *Lisa Elkin and Catharine Hawks* 1

Articles

Resources for preventive conservation and collections care
..... *Rebecca Fifield, Rachael P. Arenstein, and Molly Gleeson* 3

The state of the art in cultural property risk analysis: Reflections on the Lisbon
2011 International Symposium and Workshop on Cultural Property Risk
Analysis *Robert Waller* 18

Research on energy savings in collections environments: A case study of Yale
University's Sterling Memorial Library
..... *Jeremy Linden, James Reilly, and Peter Herzog* 26

Effectiveness of entomological collection storage cabinets in maintaining stable
relative humidity and temperature in a historic museum building
..... *Hanna Szczepanowska, Floyd W. Shockley, David G. Furth,
Patricia Gentili, Darnell Bell, Paula T. DePriest,
Marion Mecklenburg, and Catharine Hawks* 43

Microfading: The state of the art for natural history collections
..... *Bruce Ford and Jim Druzik* 54

Defensible collections: Designing a safe exhibit space
..... *Jeffrey Hirsch and Casey Gallagher* 72

Application of preventive conservation to solve the coming crisis in collections
management *John E. Simmons* 89

A sampling of early CCN initiatives

- Collection care staff survey report
- Reaching out to related organizations
- Special session for SPNHC 2012
- **Liaisons between organizations**
- STASH
- AIC 2014 Sustainability and Preventive Conservation

Liaisons ...



A sampling of early CCN initiatives

- Collection care staff survey report
- Reaching out to related organizations
- Special session for SPNHC 2012
- Liaisons between organizations
- **STASH**
- AIC 2014 Sustainability and Preventive Conservation

STASH

A Textile-Hanging System Composed of Readily Available Materials

Opitz, C., Collections Manager, Museum of Natural History, The University of Iowa, 11 Macbride

Purpose

Best practices for long-term storage of flat textiles call for rolling them on archival tubes and suspending the tubes, to avoid damage to textile fibers caused by folding and stacking. A simple wall rack for hanging textiles can be built using materials that are available at most home-improvement or hardware stores.

Description

This multi-row textile-hanging system consists of wall-mounted shelf standards, shelf brackets, closet poles, J-bolts, and nuts from a local big-box home-improvement store. Each row of brackets can accommodate multiple poles, and each pole can accommodate one wide roll or multiple narrower rolls.

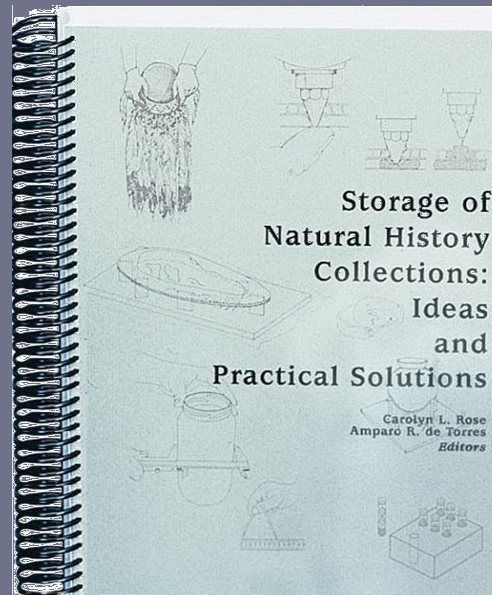
Materials, Tools & Supplies

- 2 dual-track, heavy-duty, powder-coated steel shelf standards
- Dual-track, powder-coated steel shelf brackets, 2 for each row desired
- Hollow, powder-coated steel closet poles, 1–4 for each row
- 5/16" J-bolts with hex nuts, 2 for each pole (available in 5" or 7" lengths)
- Additional 5/16" hex nuts, 2 for each pole
- Screws, for securing standards to the wall
- Screwdriver (manual or electric)
- Drill with metal bit
- Hack saw or powersaw, metal blade (optional)



A Year: Good, archival, 1 mm, organza and silk

Before its storage, multiple rolls are folded or rolled together and wrapped in dark materials, placed on top of each other



STASH FLASH



A sampling of early CCN initiatives

- Collection care staff survey report
- Reaching out to related organizations
- Special session for SPNHC 2012
- Liaisons between organizations
- STASH
- **AIC 2014 Sustainability and Preventive Conservation**

CCN at AIC 2014

Sustainability and Preventive Conservation



Meeting and discussions with liaisons



Experiences with HVAC systems and lessons learned

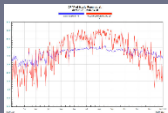


CCN technical session



STASH FLASH

Workshops proposed:



Environmental monitoring



Assessing risks to your collections

Handout

Selection of the Collection Care Network's Favorite Resources ARCS Inaugural Conference, November 2, 2013



PRESERVATION ORGANIZATIONS

- American Institute for Conservation (AIC) – www.conservation-us.org
- Heritage Preservation (HP) - <http://www.heritagepreservation.org/>
- Institute for Museum & Library Services (IMLS) - <http://www.imls.gov/>
- American Association for State and Local History (AASLH) - <http://www.aaslh.org/>

ONLINE TOOLS

General Resources

- Heritage Preservation. 2005. *A Public Trust at Risk: The Heritage Health Index Report on the State of America's Collections*.
- AIC's Collection Care Network - www.conservation-us.org/collectioncare
- Connecting to Collections Online Community - www.connectingtocollections.org
- National Park Service
 - *Conserve O Gram* - http://www.cr.nps.gov/museum/publications/conserveogram/cons_toc.html
 - *Museum Handbook* - <http://www.nps.gov/museum/publications/handbook.html>
- Canadian Conservation Institute
 - *CCI Notes* - www.cci-icc.gc.ca/publications/notes/index-eng.aspx
 - *Technical Bulletins* - [Technical Bulletins - www.cci-icc.gc.ca/publications/orderpub-commanderpub-eng.aspx](http://www.cci-icc.gc.ca/publications/orderpub-commanderpub-eng.aspx)
- Knole House Blog - <http://knolenationaltrust.wordpress.com>

Assessments

- Protect Heritage - www.protectheritage.com
- Heritage Preservation Risk Evaluation and Planning Program - www.heritagepreservation.org/REPP/
- Benchmarks in Collection Care - www.collectionslink.org.uk
- Conservation Assessment Program - www.heritagepreservation.org/cap/index.html

THANK YOU

