Planning and Managing Museum Collections

International Conference on Development of the Ho Chi Minh City Natural History Museum

September 2007
Agenda

- Strategic framework for collections
  - Context for defining purpose: typology of museums
  - Traditional vs. modern natural history collecting

- Fundamental documents:
  - Collections management policy
  - Strategic plan for collections
  - Performance measures
  - Collections plan

- Some take-aways
Smithsonian Institution
An Overview
Smithsonian Institution

- Origination: James Smithson, an English scientist who died in 1829, bequeathed his property to the U.S.
  - “To found at Washington, under the name of the Smithsonian Institution, an Establishment for the increase and diffusion of knowledge”

- Governing Board of Regents includes Chief Justice of Supreme Court, US Vice President, 6 US Congresspersons, and 6 citizens

- Smithsonian Secretary is the CEO
Smithsonian Institution, cont.

- 19 museums, 9 research centers, numerous educational centers and 58 research sites around the world
- More than 6,000 employees, thousands of volunteers and thousands of contractors
- Central budget: about $1 billion, 70% federal government, 30% trust (private sector)
- As a “public trust” adheres to Federal laws governing budget and performance, financial accounting, personnel, collecting cultural property, etc.
Smithsonian Institution, cont.

- 136.9 million objects in collections
- An additional 142 million books, photos and recordings
- Every year, approximately 100 traveling exhibitions at 300 locations
- In 2006, over 23 million museum visits and 150 million web visitors
- 85,000 contributing members
Office of Policy and Analysis
http://www.si.edu/opanda

Planning  Execution  Evaluation

- Strategic planning (Institution-wide, units/offices)
- Performance plans and measures
- Operational planning
- Audience research (e.g., formative studies and prototyping)
- Trend analyses
- Issue papers

- Management and policy studies (e.g. Collections, Advisory Boards, Exhibitions)
- Program evaluations
- Visitor satisfaction studies (e.g., surveys, interviews)
- Case studies
- Performance reports
Strategic Framework for Collections

- Purpose of the museum
- Role of the collection
- Functions it will serve
Strategic Framework

Answers fundamental questions:
- Why does the museum seek to exist?
- What is the museum’s scope? national? regional? city?
- Who are its stakeholders?
- Who are its potential users?
- What are the functional priorities—collections and research? public programs? education? other?
- How will collections support its purposes?
- How will it know what success looks like?
SWOT Analysis

- Identify the organization’s
  - Strengths
  - Weaknesses
  - Opportunities
  - Threats
- Do staff and stakeholders perceive things differently?
- Something can be both weakness and opportunity, etc.
Scanning the External Environment

- Who are the key players in the museum’s world (e.g., visitors, users of educational materials, funders, “competitors,” research organizations, stakeholders)?
- What challenges and opportunities does the external environment pose?
- How is the external environment likely to change in the next 5-10 years?
Scanning the External Environment

How does the museum relate to other organizations and external conditions?

- Government at different levels
- Other museums, cultural institutions
- Educational institutions
- Private sector
- Funding sources
- Tourist industry
- General and specialized publics (e.g., families, ethnic groups, students, scientists)
- Other
Context for defining purpose

Roles of museums
A Typology of Museums

- Encyclopedic museums
- National identity museums
- Subject specialist museums
- “Consumable" museums
Collecting Roles

Encyclopedic museums
- Present a universal view of humanity’s achievements and knowledge
- Rich and varied collections, significant redundancy
- Vast reservoir of scholarship
Collecting Roles

- **Encyclopedic museums**
  - Primary value: Size and information
  - Predominant use: Research and reference

- National Identity museums
- Subject Specialist museums
- Consumable museums
Collecting Roles

Encyclopedic museums

National identity museums

- Present national histories/aspirations
- Contextual information, enrich the national tableaux
- Vehicles in building/reconstructing national identity
National identity museums

- Predominant use: Symbolism
- Primary value: Representativeness
Collecting Roles

- Provide high-level academic and technical support for scholarship that serves both national and international audiences.

Subject specialist museums
Collecting Roles

Subject specialist museums

- Primary value: Aesthetic quality and rarity
- Predominant use: Display and exhibition
Collecting Roles

“Consumable” museums

- Handling original objects gives users an enhanced experience of collections, engaging all senses.
Collecting Roles

“Consumable” museums

- *Primary value*: Temporary instructive
- *Predominant use*: Education and interaction
Uses of collections

Display

Research and reference

Education and interaction

Symbolism
Uses of collections

- Display
  - Direct experience of collections by public
    - Exhibitions
    - Programs
    - Open storage
    - Open conservation labs
    - Visits to closed storage
  - Value: Seeing “the real thing”

- Research and reference

- Education and interaction

- Symbolism
Uses of collections

Display

Research and reference

Education and interaction

Symbolism

- Study of collection objects to learn more about their fundamental characteristics and context; natural history collections, in particular, are often assembled primarily for research

- Value: overall depth and range
Uses of collections

- Display
  - “Study,” “teaching,” or “demonstration” collections, specifically for handling by the public
  - Value: handling original objects gives users an enhanced experience of collections, engaging the senses

- Research and reference

- Education and interaction

- Symbolism
Uses of collections

Display
- Collecting for the sake of posterity, national identity, or the power of the object itself

Research and reference
- Value: adding an object to the museum’s collections implicitly states that the object is, in some sense, “important”

Education and interaction

Symbolism
## Museum Types and Predominant Collections Uses

<table>
<thead>
<tr>
<th>Type</th>
<th>Collection function</th>
<th>Primary collection value</th>
<th>Predominant use</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Encyclopedic</td>
<td>Sweeping view of humanity's cultural achievements and scientific knowledge</td>
<td>Size and information</td>
<td>Research and reference</td>
<td>The British Museum; State Hermitage Museum; Louvre</td>
</tr>
<tr>
<td>National identity</td>
<td>Symbolically represent the history, culture, and values of a particular nation</td>
<td>Representativeness</td>
<td>Symbolism</td>
<td>Hungarian National Museum; National Museum of Helsinki; National Museum of Ireland</td>
</tr>
<tr>
<td>Subject specialist</td>
<td>Specific areas of the arts, sciences, or culture; support high-level scholarship</td>
<td>Aesthetic quality and rarity</td>
<td>Display and exhibition</td>
<td>National Archaeological Museum in Athens; National Museum of Ethnology in Osaka; Victoria and Albert Museum in London</td>
</tr>
<tr>
<td>Consumable</td>
<td>Handling original objects gives users an enhanced experience of collections, engaging all senses</td>
<td>Temporary instructive</td>
<td>Education and interaction</td>
<td>Smithsonian Folklife Festival Please Touch Museum, Phila. Few national examples; but most employ some kind of hands-on collections use</td>
</tr>
</tbody>
</table>
Tensions among uses

- What makes an object valuable to one use may not be as important to another
  - Proper identification is essential for a reference collection
  - Visual interest is more important for display objects
- Sometimes using an object in any way comes at the expense of preservation

Management must strike a balance
Traditional vs. Modern Natural History Collecting
Need to question assumptions of 19th Century NH Museums

- **Traditional**
  - Cabinet of curiosities
  - Specific disciplines
  - Primitive peoples as specimens
  - Biological materials abundant, for the taking
  - Collecting opportunistic, encyclopedic
  - Cost of storing collections not a major consideration

- **Modern**
  - Information essential to survival of planet
  - Interdisciplinary
  - Culture and social sciences
  - Biological materials threatened, protected, national heritage
  - Collecting focused, strategic, bounded
  - Collections very expensive to maintain
Need to question assumptions of 19th Century NH Museums

- **Traditional**
  - Collections proprietary
  - Specimen important
  - Outright ownership
  - Physical libraries
  - Information silos

- **Modern**
  - Collections shared
  - Information important
  - Shared ownership; long term loan (NMNH)
  - Online resources
  - Global scientific infrastructure
Questions for Modern NH Museums

- Does the traditional “packaging” of specific sets of disciplines (anthropology, botany, geology, entomology, paleontology, zoology, etc.) make sense?
  - Research and applicable knowledge are increasingly interdisciplinary
  - Social sciences (e.g. anthropology) are approached in different ways than “hard sciences”
Questions for Modern NH Museums (cont.)

- Does the traditional “packaging” of functions make sense?
  - Should public programs/exhibitions and science research be “packaged” together, e.g., a science center with no collections and a biodiversity research institute off-site?
  - Is some research better done in a university setting, e.g., research requiring high tech instrumentation?
    - What is the link to the university community? Partner? Collaborator?
Fundamental Collections Management Documents

Statement of Purpose / Mission Statement
Collections Management Policy
Strategic Plan for Collections
Performance Measures
Collections Plan
Policies versus Plans

**Policies**
- General guidelines to regulate the activities of the organization
- Standards for exercising good judgment
- Delegation of authority for implementation
- Not inherently time-limited; endure until circumstances require change

**Plans**
- Specific goals to be achieved
- Rationale for these choices
- How they will be achieved
- Who will implement?
- When will it happen?
- What will it cost?
- Time-limited; intended to be achieved in a finite period of time

Collections Management Policy

Sets guidelines and standards of practice
Policies Address Stewardship Responsibility

- Legal, social, and ethical obligations of public trust
- Proper acquisition, use, and disposal
- Proper preservation and care
  - Documentation
  - Inventory
  - Storage
  - Conservation
- Intellectual control and accessibility standards
Strategic Plan for Collections

Identifies collections activities to be carried out and timeframes

Establishes performance measures and targets
Focus Area: Inventory/Documentation

- Establishment of central registration/documentation system (manual and/or electronic) for accountability and standardization
  - House in one system or systems that can “talk” to each other
- Includes accession records, catalogues, photographs, location records, condition reports, loan records, significance assessments, and documents on deaccessions and disposals
  - Good metadata (e.g., provenance, GPS data) is key
Focus Area: Storage

- Major dangers to stored collections include, but are not limited to:
  - Layout — crowded, poorly configured, or poorly equipped space
  - Neglect — mislabeled or misplaced items
  - Handling — excessive or improper handling
  - Theft — inadequate security equipment, monitoring, or access procedures
  - Temperature — unstable or extreme temperatures
  - Humidity — unstable or inappropriate relative humidity
  - Pollutants — damaging levels of compounds such as sulphur dioxide, nitrogen dioxide, and asbestos
Focus Area: Storage

- Major dangers to stored collections include, but are not limited to (cont.):
  - Fire — *inadequate fire detection and suppression systems*
  - Water — *susceptibility to flooding or damage from water line breaks*
  - Light — *inadequate control of light, especially ultra-violet*
  - Insects — *limited or ineffective pest control*
  - Containment — *storage materials that harmfully interact with collection items*
  - Biological hazards — *presence of molds due to excessive humidity*
Focus Area: Conservation

- Extend lifetime of collections item *consistent with its importance and function*
  - Preventive conservation: monitoring and controlling environment where collection is stored or displayed to minimize effects of agents of deterioration
    - Condition and Significance Assessments
  - Preservation: provision of physical and chemical treatment to protect and stabilize collection object and prevent loss of intellectual or aesthetic value
    - Materials research
3 Schemes for Prioritizing Care, Use, and Access
Profiling: National Museum of Natural History

- **Conservation**
  - Physical state of items is unstable, degraded but stable, stable and not degraded, or optimal

- **Processing**
  - Items are unprocessed, sorted but not accessioned and/or labeled, or fully processed with accurate and complete archival labels

- **Storage**
  - Building/room or storage equipment is substandard or museum-quality

- **Arrangement**
  - Items are not arranged, arranged but needing improvement, or fully arranged

- **Identification**
  - Items are not identified, identified to the gross level, identified to a useful level, identified to an accepted standard, or identified by an expert

- **Inventory**
  - Items are not inventoried, inventoried at the collection level, or completely inventoried
Significance Assessment: US Library of Congress

- **Platinum**: most priceless items
  - Most precious items such as the Gutenberg Bible
- **Gold**: rare items with prohibitive replacement cost, high market value, and significant cultural or historical importance
  - First editions and rare books, daguerreotypes, wax cylinder recordings
- **Silver**: items requiring special handling / items with high risk of theft
  - Computer software, popular titles in print, videos, and compact discs
- **Bronze**: items used without special restrictions in the reading rooms and materials loaned without stringent restrictions
- **Copper**: items not intended for retention being held while deciding what to do with them
  - E.g., items used for exchange and gift programs
Significance Assessment: The Netherlands

Delta Plan for the Preservation of Cultural Heritage, Netherlands

- Category A — unique, singular examples, holotypes, or prototypes.
- Category B — objects important for their presentation value, and objects with important documentary value.
- Category C — objects that “round out” a collection or add significance to its overall context.
- Category D — objects that do not complement or fit into the collection, or are so severely damaged that restoration is useless.
Other Plans Flowing from Strategic Plan for Collections

- Digitization Plan
- Cyclical Inventory Plan
- Performance Plan
- Collections Plan
Collections Plan

The vision for the collection
Addresses shaping the collection through acquisitions and disposal
Collecting: Traditional vs. Modern Museums

- **Traditional Museum**
  - Individualistic / curator-driven
  - Ad hoc, idiosyncratic collecting
  - Building the collection
  - Does it fit within the collection?
  - Curatorial staff
  - Builds on predecessors’ interests and adds new topics, but isolated from museum’s larger goals

- **Modern Museum**
  - Intellectual framework
  - Strategic, integrated collecting
  - Shaping the collection
  - What should be in the collection?
  - Broad support; diverse points of view
  - Vision for the collection; not restricted by the past
Fundamental Questions for Collections Plan

- Do you need a vast quantity of specimens?
  - Collections are expensive to maintain, e.g., for frozen tissue collections, must guarantee freezers will be cold
  - Much greater availability of bioinformatics and other collections information online (e.g., Encyclopedia of Life, project ongoing)

- Do you need a large physical library?
  - Again, can online resources substitute?
Fundamental Questions for Collections Plan

- Where are the pre-existing collections / knowledge of Vietnam, e.g., Paris?
- What is the relationship with other local, regional, national, and global collections and research organizations? (e.g., National Herbarium; National Agricultural Research Institute)
- Will you combine collections, agree not to compete, borrow, share, etc.?
Fundamental Questions for Collections Plan

For a national biological survey:

- What does Vietnam have and what does it need?
- What do neighboring countries have: Laos, Cambodia, Thailand, Malaysia, China?
- How do you interface and avoid duplication of effort?
National Biological Surveys: Two Models

Costa Rica (NBSCR)
- Decision to “collect everything”
- Conducted survey for 15 years
- Result was “a lot of dead insects” but little knowledge to address biodiversity problems

Mexico (NBSM)
National Biological Surveys: Two Models (cont.)

Costa Rica (NBSCR)
- Sent teams of graduate students to data mine collections in US and elsewhere

Mexico (NBSM)
- Focus on analytical capacity
- Now world leaders in applying knowledge of biodiversity to current and future problems
Performance Measurement
What are we getting for the money we are spending?

- What is your collections management program trying to achieve? (goals and objectives)
- How will its effectiveness be determined? (measures)
- How is it actually doing? (assessment against performance targets)
# Collections Management Results Spectrum

<table>
<thead>
<tr>
<th>Inputs</th>
<th>Work Process Outputs</th>
<th>Client Benefits</th>
<th>Strategic Outcomes</th>
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<tbody>
<tr>
<td>$$$</td>
<td>Development and refinement</td>
<td>Education</td>
<td>Preservation of cultural and natural heritage for future generations</td>
</tr>
<tr>
<td>People</td>
<td>Physical care and management</td>
<td>Enjoyment (wonder and awe)</td>
<td>Conservation of species and habitats</td>
</tr>
<tr>
<td>Facilities</td>
<td>Intellectual and information mgmt.</td>
<td>National/regional cultural identity &amp; sense of belonging</td>
<td>Economic impact</td>
</tr>
<tr>
<td>Measurable</td>
<td>Usually measurable</td>
<td>Access to collections for research</td>
<td>Scientific breakthroughs</td>
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<td></td>
<td></td>
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<td>Improved well being</td>
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Difficult but feasible to measure

Difficult or impossible to measure
Measuring Results: Work Process Outputs

- Development and refinement
  - Up-to-date collections plan
- Physical care and preservation
  - Up-to-date inventory
  - % targets met for care and storage that meet or exceed accepted standards
- Intellectual and information management
  - % collections documented in manual or electronic collections information system (CIS)
- Access
  - # objects on loan
  - # reference requests
  - % collection records/images available to public online
Measuring Results: Client Benefits

- **Education ~ Enjoyment**
  - % visitors on museum survey who give highest ratings to enjoyment, learning, and appreciation of museum objects

- **National identity & sense of belonging**
  - % visitors on museum survey who mark “feeling connected to my heritage” as a satisfying museum experience

- **Science & other research**
  - # new taxa described or revised
  - % visitors on museum survey who mark “understanding how scientists work,” and/or “appreciating the need for research” as a satisfying museum experience
Some take-aways
Take-away

Define clearly at the outset

- The purpose of the museum
- The vision of the museum
- Functional priorities—collections and research? public programs? education? other?
- Who the audiences are
- What the museum wants to communicate to them and why
Take-away

- Clarifying the predominant museum type and collections use provides context for decision-making
Take-away

- Traditional “packaging” of natural history museum disciplines and functions may not make sense for a modern museum
Take-away

- Engage in adequate planning—apply the 80/20 rule (80% planning / 20% implementation)
Take-away

- Good documentation and metadata (e.g., provenance, GPS data) is critical
- Need one coherent system – especially if coalescing existing small museum or university collections
- Bio-informatics is a key consideration from the start: How will information that the object represents be used?
Take-away

- Make sure collections are aligned with the reality of long-term maintenance and increasing demands of preservation
Take-away

If considering a national biological survey, a hybrid model may be best:

- Data mining / collaboration with existing global networks
- Fill gaps with field collecting
- Strong analytical perspective
Selected References

- Concern at the Core: Managing Smithsonian Collections (2005)
Selected References


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- Carole Neves, Director, Office of Policy and Analysis, nevesc@si.edu
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THE END

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