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**APPENDIX E: LEXICONS**

**A. Overview**

1. **What is a lexicon?**
   
   A lexicon is a standardized vocabulary or dictionary of terms. It establishes relationships between words by placing them in categories within a hierarchy. A lexicon allows you to select the most appropriate term. It also allows you to move from that term to a broader, narrower, or related term.

2. **Why should I use a lexicon?**
   
   Use a lexicon to:
   
   - act as an authority table
   - establish a relationship between words
   - expand your capability to search your database
   - maintain consistency in data entry

3. **How can I expand my data search capabilities by using a lexicon?**
   
   Lexicons allow you to search by categories or by groups of terms rather than searching for each term individually. For example, you can search for Building Materials, rather than individual types of building materials, such as brick, nail, or mortar.

4. **What lexicons are included in ICMS?**
   
   ICMS includes several lexicons:
   
   
   - NPS Classification Terms based on the NPS *Museum Handbook, Part II, Museum Records (MH-II)*.
   
   - Hierarchical Classification Outline (HCO) from the *MH-II*.
   
   - Integrated Taxonomic Information System (ITIS)
   

5. **Can I add additional lexicons to ICMS?**
   
   Yes. You can add unit lexicons to ICMS. Refer to Section I of this chapter for information on unit lexicons.

**B. Nomenclature 3.0**

1. **What is Nomenclature 3.0?**
   
   *Nomenclature 3.0* is a system for classifying and naming historic material. The system is based on an object’s original function.

2. **How do I use Nomenclature 3.0 lexicon in ICMS?**
   
   You must use the *Nomenclature 3.0* lexicon to classify and name history objects. The classification categories and object terms appear in tables within ICMS. Access the classification terms in Classification Lines 2, 3 and 4. Access the object terms from the Object field. Refer to Section IV of Chapter 2 for information on cataloging history objects.
There is also a Revised Nomenclature field on the archeology specialty screen. This field allows you to use the *Nomenclature 3.0* lexicon with historic archeological material.

**From any memo field in the program, you can access a list of Nomenclature 3.0 and AAT terms to use as vocabulary.**

**Note:** To access the *Nomenclature 3.0* object term table in a memo field, press F5 or right click and choose Browse Lexicon. Once you are in the table, click *Re:discovery Lexicon* to see the term in the hierarchy.

### 3. Where do I go to find information on Nomenclature 3.0?

To learn how to use the *Nomenclature 3.0* system for classifying and naming objects:

- Read the opening chapters in the book. Every site should have at least one copy of *Nomenclature 3.0*. If you don’t have the book at your site, contact the Park Museum Management Program or your bureau’s museum property contact.

- Refer to the NPS instructions for using the book in the *MH-II*, Appendix G.

### 4. Can I add terms to Nomenclature 3.0?

Yes. Bureaus may add terms to *Nomenclature 3.0*. Send requests for additional terms to your bureau’s museum property contact. *ICMS* includes the most recent list of additional terms. The *Nomenclature 3.0* object list in *ICMS* will be periodically updated to include the new terms. For the NPS, refer to the *MH-II*, Appendix G, for instructions on submitting object terms.

**Note:** You cannot add classification categories to *Nomenclature 3.0*.

### C. NPS Classification Terms

#### 1. What are the NPS Classification Terms?

The NPS Classification Terms were chosen by various NPS discipline groups to use in classifying cultural resources collections. The terms vary by discipline.

#### 2. How do I use the NPS Classification Terms lexicon in ICMS?

You must use the NPS Classification Terms lexicon to classify cultural resources collections (archeology, archives, ethnology, history). The classification categories appear in tables within *ICMS* for Classification Lines 1-4. Refer to Sections I-IV of Chapter 2 for information on cataloging cultural resources collections.

#### 3. Where do I go to find information on the NPS Classification Terms?

The following appendices in the *MH-II* contain information on the NPS Classification Terms:

- Appendix D: Archives and Manuscript Collections
- Appendix E: Archeology
- Appendix F: Ethnology
- Appendix G: History

#### 4. Can I add classification terms?

No. You cannot add classification terms or categories. The classification tables are locked tables.
D. HCO

1. **What is the HCO?**
   The HCO is a system for classifying natural history specimens. The NPS developed the system in collaboration with discipline-specific specialists in NPS and other institutions.

2. **How do I use the HCO lexicon in ICMS?**
   You must use the HCO in ICMS to classify geology specimens in the Natural History directory. The classification categories appear in tables within ICMS for Classification Lines 1-4 for geology. Refer to Section VI of Chapter 2 for information on cataloging geology collections.

   **Note:** Biology and paleontology specimens now use the ITIS system to complete the classification. Refer to Sections V and VII of Chapter 2.

3. **Where do I go to find information on the HCO?**
   The HCO is part of the MH-II, Appendix H: Natural History. The appendix includes an explanation of how to use the HCO.

4. **Can I add classification terms to the HCO?**
   No. You cannot add terms to the HCO.

E. ITIS

1. **What is ITIS?**
   The Integrated Taxonomic Information System (ITIS) is a partnership of U.S., Canadian, and Mexican agencies (ITIS-North America); other organizations; and taxonomic specialists. ITIS is also a partner of Species 2000 and the Global Biodiversity Information Facility (GBIF). It is an online database that includes authoritative taxonomic information on plants, animals, fungi, and microbes of North America and the world.

2. **How do I use ITIS in ICMS?**
   You can use ITIS in ICMS to complete the classification fields for biology and paleontology specimens in the Natural History directory. The ITIS database is accessed through the Find Specimen link when adding, copying or modifying a biology or paleontology record. Refer to Sections V and VII of Chapter 2 for information on cataloging biology and paleontology specimens.

   **You are not required to use ITIS to complete the classification fields. You can enter classification information individually if the specimen you are cataloging does not exist in the ITIS database.**

   You must be connected to the internet to download the ITIS update files. To update the ITIS table in ICMS:

   • Go to the Tools menu and select ITIS tables Update

   Additional terms from paleontology collections that do not appear in the ITIS database have been added to the ICMS copy of the database.

3. **Where do I go to find information on ITIS?**
   Information about ITIS can be found on their web site. Using Internet Explorer, go to http://www.itis.gov.

4. **Can I add classification terms to ITIS?**
   No. You cannot add terms to ITIS. ITIS continually updates their database with new information. Updates to the ITIS database will be available in ICMS through the ITIS Tables Update option on the Tools menu (see E.5 below).

5. **How do I update the ITIS table in ICMS?**
   You must be connected to the internet to download the ITIS update files. To update the ITIS table in ICMS:

   • Go to the Tools menu and select ITIS tables Update
Note: If the ITIS update zip file was provided to you with an upgrade or you downloaded it from the Rediscovery ftp site at ftp://ftp.rediscov.com/ICMS/ITIS, skip to the Unzip and Install tab instructions below.

- Click Check for Updates to determine if you have the latest version of the ITIS tables.

- If the response indicates that there is an update available for your system, click on the Download ITIS tab.

- Enter a location to save the download file on your computer. You can also click the Browse link to select a folder.

- Click the Download link to begin the download.

- When the download is complete, click on the Unzip and Install tab.
• Check that the full path to the zipped ITIS file is correct, or click the Browse link to locate the ItisTables.zip file.

• To install the ITIS update, click Update Re:discovery ITIS tables. The processing steps will be displayed.

• When the update has completed, click the X to close the window.

F. AAT

1. What is the AAT?

The Art & Architecture Thesaurus (AAT) provides a standardized vocabulary for fine arts, architecture, decorative art, and material culture of the Western world. The AAT is an evolving indexing language that is open to user suggestions. It is:

• constructed as a list of single concepts
• arranged within facets (see F.3. below)
• displayed hierarchically and alphabetically
• designed for indexing and retrieving

The AAT isn't a classification system, data structure standard, or cataloging
system. It doesn't contain personal, corporate, building, institutional, or geographic names or historic events.

2. **What is a thesaurus?**

   The *AAT* defines a thesaurus as "the controlled vocabulary of an indexing system, arranged in a known order and structured so that synonymous, hierarchical, and associative relationships among terms are clearly displayed and identified by standardized relationship indicators."

   A well constructed thesaurus:
   
   - establishes a preferred form of a term
   - links synonyms and spelling variants
   - provides consistency for information retrieval
   - provides authority for usage of the term
   - uses classification principles to structure terminology

3. **What are AAT facets and hierarchies?**

   There are 8 facets and 35 hierarchies in the *AAT*:
   
   - A facet is a homogeneous class of concepts. Members within a facet share characteristics that distinguish them from the members of other classes.

     Example: Marble falls within the Materials facet. Impressionist falls within the Styles and Periods facet.

   - A hierarchy is a homogeneous grouping of terminologies arranged within the 8 facets. Hierarchies display relationships between terms.

     Example: Relief prints include woodcuts, relief etchings and wood engravings.

4. **How do I use the AAT lexicon in ICMS?**

   You can use the *AAT* in several ways in *ICMS*:
   
   - On the history record, use the Term AAT field to record a term for the object. Refer to Section IV of Chapter 2 for information on cataloging history objects.

   - From any memo field in the program, you can access a list of *AAT* and *Nomenclature 3.0* terms to use as vocabulary.

   - Use the *AAT* in a word search to extend the search to include related words in the lexicon. Refer to Section H below.

   **Note:** To access the *AAT* in a memo field, press F5 or right click and choose Browse Lexicon. Once you are in the table, click Re:discovery Lexicon to see the term in the hierarchy.

   *You are not required to use the AAT.*
5. **Where do I go to find information on the AAT?**

To learn how to use the *AAT*:

- Purchase or borrow the printed edition of the *AAT*. The Bureau does not supply the *AAT* to units. Use of the *AAT* is optional.

- Take a training course on how to use the *AAT*. Contact the Getty Art History Information Program for information on training courses.

For information on the *AAT*, contact:

The Getty Information Institute  
1200 Getty Center Drive  
Suite 300  
Los Angeles, CA  90049-1680  
310-440-6379

6. **Can I add terms to the AAT?**

No. You cannot add terms to the *AAT* lexicon within **ICMS**. However, you can submit terms to the Getty Art History Information Program for consideration. Re:discovery Software, Inc. will periodically update the *AAT* lexicon in **ICMS** as updates are released from the *AAT*.

G. **Browsing the Lexicons**

1. **How do I access the browse lexicon feature in ICMS?**

You can access the browse lexicon feature from any record. To access the browse lexicon screen:

- Click the Lexicon button 📚 on the button bar

- Under Go To on the View menu from most places in the software, choose Lexicon.

- From a field using the lexicon as the authority table, press F5 or right click and choose Zoom. Then click Re:discovery Lexicon. **Note:** If the field is a stacked authority field, you will have to expand it first by pressing F5 or F12 and then press F5 in the single lexicon entry line.

- When in Add, Copy or Modify mode, right-click in a memo field and choose Browse Lexicon. Then click Re:discovery Lexicon.
The Lexicon window consists of 3 panes just like the main system screen. These panes are resizeable using click-and-drag to resize them.

- The Navigation Pane on the left shows you the lexicon in a tree view and lets you navigate terms using the hierarchy.

- The Record Pane on the bottom right shows you the currently selected term record. The Term tab contains information about the classification of the term while the Relationships tab contains related terms (Broader, Narrower, Use For and Equivalent, Alternate, Related, UK, and UK Alternate).

- The List Pane on the upper right displays the selected term’s most immediate relationships as entered on the Relationships tab in the term’s record. Just like in the List Pane of the main system, you can click on the column headers to resort and filter the related terms.

Simply double-click a term in the Navigation Pane to load it into the Record Pane, see its relationships in the List Pane, and to expand it in the Navigation Pane to display its sub-terms.

2. How do I browse a lexicon in ICMS?

There are several ways to navigate the hierarchical lexicon.

- You can use the Term Lookup just above the Navigation Pane.

- You can use the Tree in the Navigation Pane to find a term.

- You can use the List Pane to load a term by simply double-clicking on the term.

- You can use the Breadcrumb at the top of the window just below the button bar. Click on any term in the breadcrumb to load that term.

From Term Lookup

If you know what term you want to view but do not know what lexicon(s) it is in or where it falls in the hierarchy, you can go directly to it using the Term Lookup field.

- Click the icon in the Term Lookup field, press [F5], or start typing the term and the Term Selector window will open showing the list of lexicon terms.

Note: As you type in the Search field, the list will take you to the term. The description column indicates in which lexicon(s) the term is found.
When you find the term you want, click Select. That term will load into the Record Pane, its related terms will display in the List Pane, and the Navigation Pane will show where it falls in the hierarchy.

From the Navigation Pane

You can use the tree in the Navigation Pane to navigate through the hierarchy to find a term. Simply double-click a term in the Navigation Pane to load it into the Record Pane, see its relationships in the List Pane, and to expand it in the Navigation Pane to display its sub-terms.

Choose the lexicon you want to navigate through using the pull down menu in the Lexicon field. Your choices are:

- AAT
- HCO
- Nomenclature 3.0
- NPS Classes
- NPS Rev Nom
- Park Lexicon

The tree in the Navigation Pane will refresh to show you the most immediate narrower terms of the nomenclature selected.
• Double-click on the next term you want to expand to see its most immediate narrower terms.

Example: Double-click COMMUNICATION ARTIFACTS. It will load that term into the Record Pane, show its related terms in the List Pane, and display its location in the hierarchy in the navigation tree.

• Keep double-clicking terms in the tree until you get to the desired term. (You can also use the Expand Tree and Collapse Tree links to open or close the different levels.)

**Note:** At the bottom of the Navigation Pane, click **Select Previously Viewed Term** to load the term you were just looking at in the Record Pane.

**From the List Pane**

As you navigate around in the lexicon, you can load any term you see in the List Pane by simply double-clicking it. It will become the selected term and will load that term into the Record Pane, show its related terms in the List Pane, and display its location in the hierarchy in the navigation tree.

**Breadcrumb**

At the top of the screen, below the button bar, is a Breadcrumb showing you the trail of the direct path down the hierarchical lexicon from the topmost parent term to the currently selected term.

You can click on any term in the Breadcrumb to load that term into the Record Pane.

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**H. Using Lexicons with Advanced Search**

1. **How do I use lexicons with the Advanced Search function?**

   You can use the lexicons within the program to specify terms that you want to add to a search. Using terms within the lexicon, you can extend your search to associated, narrow, broader, related and sibling terms.

   To extend an Advanced Search using a lexicon:

   • In the Advanced Search window, enter a term in the search box.
• Check the appropriate box on the right under Lexicon Options to extend a search. By clicking on the box, you can add or remove a check mark to designate the terms to include. You can also click Reset to Default to clear all checked boxes. The lexicon options are:

  **Proper Term** – will look for the word you enter, plus the proper usage of the word. For example, if you search for IMPRESSIONISM, Advanced Search will also look for IMPRESSIONIST.

  **Associated Terms** – will look for the term you enter, plus any terms associated with it, according to the lexicon.

  **Narrower Terms** – will look for the term you entered, plus narrower terms as defined by the lexicon. If you enter SHOE, search will also look for MUKLUK.

  **Broader Terms** – will look for the term you entered, plus broader terms as defined by the lexicon.

  **Related Terms** – will look for the term you entered, plus Related terms as defined by the lexicon. For example, if you enter MUGS, search will also look for CUPS.

  **Note:** If you do not see the Lexicon Options tab, check the More Options box on the lower left of the Advanced Search window.

• If you would like to see the terms that will be searched, click Show lexicon terms to search and the list will populate with the terms from the lexicon that are linked to the term you entered according to the lexicon option(s) you chose.

  **Note:** If you do not want to search all the terms listed, you can check terms in this list that you want to exclude from the search.

During the word search, you will see the various lexicon terms flash on the screen. The search results will include the keyword(s) and the other lexicon terms you selected. When the search is complete, the lexicon terms that were searched will appear in the Related Words Searched For box on the Search Results tab.
Refer to Section I of Chapter 7 for information on how to conduct a word search.

I. Creating a Park Lexicon

1. What is a park lexicon?

   A park lexicon is a vocabulary of terms and relationships that you develop from the specific material at your site. For example, you may want to associate specific names or objects as narrower terms under various broad terms. You can then do one search to find all the records that contain information on objects or people associated with the terms.

2. Where do I go in the program to create a park lexicon?

   To create a park lexicon you must go to the Re:discovery Lexicon screen. To access the screen:

   - Click the Lexicon button on the button bar, or
   - Under Go To on the View menu from most places in the software, choose Lexicon.

   The Re:discovery Lexicon window will open.

   Note: You don’t need special security access to create a park lexicon.

3. How do I create a lexicon?

   Creating lexicons requires a lot of time and effort. You must precisely define the terms you want to use. You must also precisely define how the terms fit within a hierarchy of broader, narrower, and synonymous terms.

   Before creating a park lexicon, it’s a good idea to talk to other sites that have created lexicons. Contact Re:discovery Software, Inc. at 434-975-3256 for the names of sites or other museums that have created their own lexicons.

4. How do I add a term to the park lexicon?

   To add a term to the park lexicon:

   - Choose Park Lexicon from the Lexicon pull down in the upper left.
   - Click the Add button on the button bar, press [F9], or select Add New Term on the Edit menu.
   - The Record Pane will open a new record ready for you to fill in and Add Mode appears in the lower right of the Status Bar.
• Fill in the classification information on the Term tab.

**Term:** Enter the new term. This is a required field.

**Lexicon(s):** The lexicons this term is a part of. PRK will automatically be entered. You cannot edit the field.

**Classification:** Enter PRK if this is a preferred term in the lexicon. If this field is blank, the term is not considered a preferred term by the system. Entering non-preferred terms in the lexicon can be a useful way to point non-preferred terms to preferred terms. When viewing the relationships in the Navigation Pane, preferred terms are displayed with **Preferred Term** next to them if they are related to a non-preferred term (Classification is empty).

**Department:** Large Institutions may want to indicate which department (archives, historical, art, etc.) entered the term. This is a user built authority field.

**Language:** Institutions managing multi-cultural collections may want to indicate the language of origin for the term.

**Approved:** Used to indicate whether the term is a generally approved term. It is not used by the system to determine whether a term is accepted or not in the formal lexicon. This approval field is for client reference only. For example, a user may enter terms that may need to be approved for use by a supervisor.

**Scope Note:** This is an optional field containing an instructional statement that defines or clarifies the usage or meaning of the concept and how it fits into the context of the nomenclature.

**See Reference:** This is an optional field, used to indicate references for the derivation for the term and its usage.

**See Also:** This is an optional field to list other terms that are similar, but not necessarily approved terms.

**Note:** This is an optional field to be used however the institution sees fit.
• To create relationships between this term and other terms in the lexicon, click on the Relationships for Lexicon PRK tab.

Note: The definitions that follow are general ones to help users begin to understand a Lexicon's structure. For additional information on Lexicons, users should refer to the Getty Information Institute's AAT website at http://www.getty.edu/research/conducting_research/vocabularies/. Also, the introduction to Nomenclature 3.0 for Museum Cataloging: Third edition of Robert G. Chenhall’s System for Classifying Man-Made Objects has information on Nomenclature 3.0.

Broader Terms: Broader terms include the "super group(s)" to which a term belongs. It is also known as the “parent term”. Nail might have a broader term of WOODWORKING T&E. This is a required field. If you do not enter a broader term, the system will fill in 'Unassigned' as the broader term. You must associate the new term with a Broader Term, even if it is just the top level ‘Park Lexicon’ term.

Narrower Terms: This relationship relates to subordinate terms. It is also known as the “child” term. If WOODWORKING T&E is a broader term of NAIL, then NAIL is a narrower term of WOODWORKING T&E.

Use For and Equivalent: When several formats of a term refer to the same concept, but there is a preferred and non-preferred format, they are equivalent. These are usually terms that appear in different languages or formats. The preferred format is indicated by a designator in the Classification field and has [Use Instead] following the term. The non-preferred form is followed by [Use For]. For example, “Concrete Art” is the preferred term and should be used in place of “art, Concrete”, “Art Concret”, and “Konkrete Kunst”.

Alternate: This will indicate valid forms of the term that may be used in place of the selected term. An alternate term is usually a singular form or a different part of speech (adjective or possessive). For example, Impressionism is an alternate term for Impressionist, but Impressionist is the preferred term. The Classification field for Impressionist indicates the lexicon where it is accepted.
**Related:** Related terms are similar concepts but not identical terms. Both can be considered preferred object terms rather than being related through hierarchical or equivalence relationships.

**UK:** This will indicate a variation in spelling of the term recognized in the United Kingdom. Color could have a UK relationship to colour.

**UK Alternate:** This will indicate a valid form of the term in the United Kingdom that may be used in place of the selected term such as shoppe for shop.

The Relationship fields are stacked lexicon lookup fields so you can select more than one term of the same type of relationship.

- Save the new term using one of the Save Options

**Save and Close:** Use to save the new term and close the Lexicon.

**Save and Add Another:** Use to save the new term and immediately bring up a new window in Add mode.

**Save:** Use to save the new term and keep the Lexicon window open.

**Note:** If the term is already part of another lexicon, you will receive a message indicating that the term already exists. To add the term to your park lexicon to set up additional relationships, you must use the Add Existing Term to Lexicon option on the Edit menu, or click the button on the button bar. The term field will then allow you to choose the term from a lexicon term selector window. You will only be able to edit the Note field and add relationships on the Relationships for Lexicon PRK tab. All other fields will be locked.

### 5. How do I edit a park lexicon term?

You cannot edit terms in locked lexicons such as the AAT and Nomenclature 3.0, but you can edit terms in the Park Lexicon. You will be warned if you cannot modify the term because it is part of a locked lexicon. To edit a term:

- Select the term in the Park Lexicon you want to edit.

- Click the Modify button on the button bar, press F10, or select Modify This Term on the Edit menu.

- The Record Pane will open the current term ready for modification and Modify Mode appears in the lower right of the Status Bar.

- Make any necessary changes to the term and its relationships.

- Click Save and Close to save the term.

### 6. How do I delete a park lexicon term?

You cannot delete a term from a locked lexicon such as AAT and Nomenclature 3.0. You will be warned if you cannot delete the term because it is part of a locked lexicon.

- Select the term you want to delete.

- Select Delete This Term from the Edit menu.
If the term has relationships set up with other terms, a warning message will indicate that there are other terms related to the term you are deleting. Deleting the term will permanently remove all relationships to other terms in the lexicon.

**Note:** If the term is part of a locked lexicon and you want to remove it from the park lexicon, select Remove This Term From Lexicon from the Edit menu.