CHAPTER 3

ALL ABOUT ACCESS
(Technical Services Resource Management)

Many good books and articles are available that address current materials acquisition and processing practices in technical services departments of libraries. *Bibliographic Management of Information Resources in Health Sciences Libraries* (1) is a good place to find basic information about the functions within technical services units. Technical services departments in academic libraries are typically comprised of acquisitions, copy cataloging, original cataloging, database maintenance, and may also include preservation and binding of materials to be shelved in the library’s collection. Most veterinary medical libraries (VMLs) do not have technical services staff on site, but rather utilize centralized technical services at their institution’s main library or health sciences library for acquiring and providing access to veterinary materials. Every few years the Veterinary Medical Libraries Section of the Medical Library Association conducts a survey of the libraries serving the 32 U.S. and Canadian veterinary colleges that are accredited by the American Veterinary Medical Association. The 2000/2001 survey (the most recent available) offers a snapshot of some of the technical services functions utilized by these libraries. Of the 22 libraries that reported data about cataloging functions in their library, 10 have cataloging done by some other library at their university, and 4 share the responsibility with another library. All but one of these libraries also reported having OPAC maintenance done by someone in the other library. Three other libraries share cataloging responsibility and OPAC maintenance with another library, and 1 VML catalogs its own materials, including database maintenance. Therefore, materials, for the most part arrive at these libraries and collections “shelf-ready.”

**ACQUIRING MATERIALS**

Acquisitions departments of academic libraries typically acquire materials in all formats and languages, although in the U.S. and Canada, the predominant language is English. This process includes searching for, ordering, payment, receipt and processing of monographs, serials, non-book material, and electronic resources. In today’s libraries, most of these activities are computerized. The physical processing of materials may be divided into specialty units such as Ordering, Receiving, and Gifts. Receiving and paying for all materials includes access to electronic resources, some of which are leased, not owned and, therefore, require licensing. Purchased electronic journals must include licensing agreements that include continued, long-term access. In many academic libraries, serial and non-serial materials are ordered and cataloged by separate units due to the unique characteristics of each.

For reasons of efficiency and economy, most academic libraries use automated vendor services to acquire monographic materials. Purchases requested by veterinary subject specialists may be made through several routes: firm orders, approval plans, and standing orders. Using vendor services reduces the time spent in the selection of titles, thus
enabling subject specialists to provide patrons with other kinds of support. Some orders are made outside this vendor process, using direct calls to small publishers, individuals or organizations. Traditionally, VMLs have collected print materials, and audiovisual or other non-print materials, such as instructional videotapes, sound recordings, slides, software, but, more recently, this also includes electronic formats such as CD-ROMS, electronic journals and citation databases. A fundamental change in the 1990s saw the incorporation of copy cataloging into the acquisitions receipt and approval process. Vendor services such as OCLC’s PromptCat copy cataloging service, and vendors such as Yankee Book Peddler Library Services, Blackwell, and Harrassowitz, are an example of this popular option that combines receipt of material and downloading of bibliographic records into the local online catalog in one streamlined operation. For the Iowa State University Library, its vendor, Yankee Book Peddler, sends about 8,000 approval books per year (including some veterinary titles), 75% of which come with Library of Congress (LC) catalog records as part of OCLC PromptCat. These books come prepared for immediate shelving with call number labels, barcodes, ownership stamps, and tattletape. Acquisitions staff briefly reviews the cataloging, and accepts about 95% of the records.

Acquisitions departments typically receive and process serials issues in all formats, manage serials subscriptions and serials exchanges, claim for unsent or missing materials, initiate electronic resources licenses and may provide links to these resources, mark and prepare print serials for binding. Serials (also called by other terms such as journals, periodicals, or magazines) are issued in successive parts (with no planned end in sight), typically on a weekly, monthly, or yearly basis, so this means a continuous process of receiving, renewing, tracking through check-in, marking and shelving.

As with monographic materials, cost and efficiency dictate the use of vendors for the vast majority of serial purchases by many academic libraries. Veterinary subject specialists are instrumental in choosing appropriate serial titles for their clientele through such vendors as Blackwell Periodical Division, EBSCO Subscription Services, Otto Harrassowitz and Swets Information Services. The development of electronic journal publishing in the 1990’s gave rise to commercial intermediary services, such as SwetsnetNavigator, EBSCO Online, Ingenta, and Serials Solutions to provide e-serial access and management and aggregator services, such as EBSCOHost EJS. These and other services offer comprehensive access to thousands of journals, including those in and peripheral to veterinary medicine. Blansit and Connor sum it up well, “Although many electronic journals correspond to their print counterparts, some republishers add value to electronic versions by including enhanced graphics, audio, video, breaking news, chat rooms, and related links” (2). A curious “side effect” of not being able to select only certain journals from each service, results in unavoidable overlapping of coverage of the same title by multiple vendors as illustrated by Iowa State University’s subscription to The Journal of Animal Ecology, which is received through Blackwell Synergy online service, Ingenta, and JSTOR.

Other methods used to identify and acquire vet resources may include specific requests from veterinary (or other) faculty, staff and students, donated items, perusing publisher catalogs, and tips emanating from librarians or librarian list servs.
BIBLIOGRAPHIC CONTROL OF MATERIALS

“For the reference librarian to do a proper job, the cataloger must first organize these resources to make them accessible.” (1)

After materials for the library have been selected, ordered and received, access needs to be provided to them. Cataloging (bibliographic control) provides description and access information that appears in the library catalog. The purpose of a catalog is to provide access to works based on known details and to identify which documents in the database cover a given author or topic. Three elements make up the online public access catalog (OPAC) found in academic libraries today: bibliographic database, search engine, and user interface. As of now, the OPAC is still the principal finding tool for a library’s collection. In many academic libraries it is a component of an integrated library system that includes portals and gateways to remote digital resources and to Internet access. The OPACs of all the U.S. and Canadian VMLs are available via the World Wide Web. Commonly, the VML shares the same online catalog with other library units on campus. One exception is the Texas A&M University Medical Sciences Library, which offers its own online catalog called “Chiron.”

Web-based catalogs continue to be built using traditional cataloging rules (although, at this time, changes are being considered). Certainly, necessary access points for a bibliographic item must be determined; however, in the electronic environment, searchers don’t need to be concerned with main or added entry, for example, but merely with authorship. Expanded bibliographic records may incorporate table of contents and summary notes with unique natural language words to enhance subject access via keyword searching in online catalogs. This eliminates much of the need to create analytical cataloging, which is of such importance to users in university and medical libraries for finding very specific topics that may have been described by traditional subject headings in general terms only.

SUBJECT ACCESS AND CLASSIFICATION OF VETERINARY MEDICINE IN LIBRARY CATALOGS

Most U.S. and Canadian medical libraries use the National Library of Medicine (NLM) or the Library of Congress (LC) in the United States to provide catalog records with controlled vocabulary (subject headings) access and classification of medical materials. The two national libraries serve the veterinary profession very differently in terms of their conceptual approach to preferred terms and classification schemes. Medical librarians should have familiarity with Medical Subject Headings (MeSH) and National Library of Medicine classification, both of which are designed to cover medicine from a human standpoint. NLM’s classification scheme organizes human physiological systems, medical specialties and regions of the body. LC’s classification scheme and subject headings, on the other hand, cover a broad range of agriculture and individual animal species in addition to veterinary medicine. Veterinary medicine falls under the broad
topic “Animal culture” in the S (Agriculture) schedule, within the classification range SF600 through SF1100.

Subject heading Practices for Veterinary Medicine

The controlled subject headings generated by the two national libraries reflect their individual conceptual approaches. MeSH’s strength in subject analysis is in its capability to deal with very specific disease conditions. The LCSH’s strength in subject analysis lies in its ability to cover a full range of topics relating to veterinary medicine whether the topics come from the agriculture, from a species concept, or from veterinary medicine itself. There is terminology and species that are peculiar to agriculture and to veterinary medicine (for example: age determination by teeth, bloat, coyotes, llamas). Because it deals primarily with human medicine, MeSH has limited terminology in these areas, making it difficult as an alternative to LCSH for cataloging veterinary materials. Nearly all of the U.S. and Canadian VMLs use LCSH in their catalogs. About one-third of the group also use MeSH in an effort to maximize the subject approach to topics in veterinary medicine.

There are a number of LC subject heading practices with which it helps to be familiar when if you are using controlled subject headings to search for veterinary information in a library catalog. One of the most obvious is LC’s practice of attaching the term “veterinary” to basic disciplines of human medicine. The OCLC Connexion Authority File Root Browse List for subject headings with the initial word “veterinary” begins with the heading “Veterinarian and client” and ends with “Veterinary ultrasononography.” “Veterinary dentistry,” Veterinary ophthalmology,” and “Veterinary radiology” are other examples of this practice. This may seem like a logical approach, but it has tended to limit veterinary subject headings to broad concepts, sacrificing specificity when it is needed, while it also limits the number of subject headings. Fewer than 200 terms appear in this list, which is lacking, for example, the subject heading veterinary otorhinolaryngology. If cataloging a title about ear, nose, throat, and tracheobronchial diseases in cats and dogs, the cataloger must take this approach with LC headings: “Otolaryngology”; “Trachea—Diseases”; “Bronchi—Diseases” [note that the veterinary aspect is not present with these three headings]; and “Cats—Respiratory organs—Diseases”; and “Dogs—Respiratory organs—Diseases.” For the same title, MeSH offers “Otorhinolaryngologic Diseases—veterinary,” “Bronchial Diseases—veterinary,” “Tracheal Diseases—veterinary,” “Cat Diseases,” (too general) and “Dog Diseases” (too general). Use of the subheading “veterinary” is a major benefit to subject searching in MeSH from the veterinary medical point of view, as it not only adds the veterinary aspect to the medical term, but it also collates materials on conditions that are common to humans and to animals.

Unfortunately, lost in LC’s subject heading approach of using the primary word “veterinary” is the key descriptive term itself. When searching “Veterinary cardiology” for example, other books on cardiology, both human and basic research oriented, are separated from veterinary titles. A separate search is needed to see ALL books on the heart, including those with subheadings. (Borrowing the subheading “Veterinary” from
the MeSH approach for use with the LC pattern heading “Heart” would better gather more heart related veterinary materials in one place).

The LCSH and the LC classification scheme do not provide for very many *individual species* veterinary specialties, such as dentistry, ophthalmology, obstetrics, orthopedics, or radiology. This causes scattering of materials that describe individual species only. Some of these titles will grouped in the catalog under the medical category while others will be placed with the species. For example, equine radiology is a very important specialty in equine medicine, but there is no provision for assigning a subheading, “radiology,” directly to the subject heading “Horses.” Instead, a more general approach is taken through “Veterinary radiology” and “Horses—Diseases—Diagnosis.” In the Iowa State University veterinary collection, the same situation is true for many materials covering commonly found conditions or procedures relating to animal species.

A strange practice by LC is the use of phase subject headings to describe some conditions, such as “Colic in horses,” “Lameness in horses,” and “Allergy in dogs,” thus limiting subject use of these conditions to certain species, when logically, making these medical conditions subheadings would extend their use to all species. Other terminology that is predominant in today’s practice of veterinary medicine, but which doesn’t exist in the LC’s vocabulary at all, are the terms “large animal medicine” and “small animal medicine.” “Small animal medicine (Pets)” is a *cross* reference under the heading “Pet medicine,” but the phrase “large animal medicine” has no existence at all. These are examples in the field of veterinary medicine where keyword searching trumps controlled subject headings.

Finally, similar to human medicine, a confounding problem for finding information about veterinary topics is the use of both lay and professional terminology to describe veterinary or agricultural concepts. While the lay person may think in terms of dog, cat, goat or cow, the professional may be thinking canine, feline, caprine, bovine, small animal, large animal, food or production animal, etc. Whether doing a controlled subject heading search or a keyword search, the best approach is to always think both ways because, for example, a book on feline leukemia may be indexed by the subject heading “Feline leukemia,” and not “Cats—Virus diseases,” while for a piece about equine influenza, “Horses—Virus diseases” may be used rather than the subject heading “Equine influenza.”

*Controlled Subject Headings or Keyword?*

All of the above discussion is well and good, but according to Thomas Mann, “Studies abound showing that researchers don’t use library subject headings. They guess at keywords” (3). In today’s computerized world, subject access includes keyword access, not only didactic multi-faceted subject strings that most users would not think to use when searching for a topic. For most users, the use of controlled subject headings to retrieve information in catalogs has been augmented, if not superseded, by keyword searching, though the precision that structured headings offer in retrieving relevant records is still undeniable. There is little doubt that familiarity with controlled subject
headings in veterinary medicine has its place in the hands of an experienced searcher. In actuality, the two searching techniques can be quite compatible when using a library catalog. Even though keyword searching, where order of words is not important, gives us limited recall and terrible precision, it is useful as an initial search to find materials on an unfamiliar topic. Subject headings gleaned from these records can then be used to increase precision searching for other items within the subject area. Mann states it succinctly regarding the use of LCSH or Google: “The difference is finding ‘something quickly’—isolated, unstructured, and disconnected information—vs. gaining a systematic overview of the conceptual field” (3). Developing ways to reach users who have sophisticated technological skills, but who have little concern for accuracy and legitimacy in retrieved documents, should be a goal of librarians.

Classification System for Veterinary Medicine

Classification or “classifying” bibliographic materials refers to organizing items in a collection of materials, usually by subject. The practice of “shelving” refers to the practice of filing, in order, the various items in a library’s catalog, usually by classification (and cutter) number, which, in turn, ensures placement of the physical items on the shelf or Web page in that order. The subject of veterinary medicine is covered in the LC classification Schedule S within the range SF600-SF1100. Most of the U.S. and Canadian VMLs use this classification scheme, although a few use the Dewey Decimal Classification, where veterinary medicine appears in the 636.089 range. The National Library of Medicine Classification schedule provides for veterinary medicine with special instructions that allow use of the LC schedules. The instructions say to use, for example, the LC classification QP (Physiology) for classifying the physiology of wild animals in general, while the SF (Animal culture) classification should be used to classify anatomy and physiology of domestic animals. Additional instructions are given in the “Index to Classification” that appears at the end of the schedule. One such instruction is “See also Veterinary under particular topics and specific animals being treated.” Following the topic “Cardiovascular Diseases,” for example, is the subtopic “Veterinary” with its suggested classification at “SF811.” Under “Cats” appears the instruction “Diseases see Cat Diseases” with its suggested classification at “SF985-986.” The NLM classification scheme is clearly designed to defer to LC practices for classifying veterinary medicine.

LC’s Schedule S begins with general aspects of veterinary medicine, followed by veterinary specialties, and animal species. There is no particular order to these topics. Because veterinary medicine tends to be species oriented, those searching for topics in veterinary medicine are more likely to start their search with the species than with a general topical category. The LC classification scheme does not centralize titles that deal with a particular major species of animal under a base number for that species, so books about a particular species of animal can be quite widely separated in LC’s Schedule S. For example, anatomy of the horse (clinical or non-clinical) may be classified at SF765 (veterinary anatomy); a disease such as glanders at SF796 (communicable diseases); age determination by teeth (a common practice with horses) at SF869 (teeth); older titles on the surgical aspects of dentistry at SF911 (veterinary surgery), and newer titles at SF959.M66; pharmacological aspects of equine medicine at SF915 (veterinary
pharmacology); and various specific diseases and pests of the horse at SF959. As with the LCSH, the catalog user simply must learn to look in more than one place when searching for information about a particular species.

When searching for veterinary materials it also helps to know about the veterinary community’s compartmentalization of animals into general categories of large animals and small animals. The LC classification scheme deals with this by tending to place materials about a mix of species in broader topical classification numbers. Illustrating this in the Iowa State University collection is the classification number SF891 “Eyes, ears, throat, etc.,” where there are 35 titles of a general nature, 14 covering small animals specifically, and 4 covering large animals only. Valuable information could be found about the dog or cat in one of those 14 titles, but it would not be found by looking in the classification for the specific species. Another approach is to classify the material with the predominant species in the item, although the seeker of information may not know which species that might be (the subject headings could give a clue). These are more instances of where it is an advantage to be aware of the scattering of species information in LC’s classification Schedule S.

ACCESS TO ELECTRONIC RESOURCES

“The chaos of the Internet is the equivalent of a book with no index or table of contents” (1).

Michigan State University’s library director declares on the university’s library’s welcome page, “The MSU Libraries strive to provide as much information and as many resources as possible electronically, thereby reducing your need to physically come to the library” (4). He recognizes that of all the forces impacting libraries today, automation has had the most impact. We are in an electronic information environment, and we need to emphasize immediacy of information access in order to best serve our users. For optimum value, that information must be organized and managed.

“To find a book or journal in a library with no catalog would be nearly the same as searching for information on the Internet.” (1)

With the trend away from acquiring and organizing the physical holdings in libraries and instead towards acquiring and providing access to electronic materials, technical services are transitioning towards providing more access for Web-based resources. The emergence of Web-based OPACs has led to the library catalog becoming a main interface for accessing electronic resources. Whether cataloged or listed on library Web pages, organizing Web documents to ensure reliable retrieval of information is a new challenge for libraries that spans several groups, including technical services, public services, and library systems. At the ISU Library, in general, paid titles and important free titles are both cataloged and listed on Web pages, while ephemeral or less important free titles are listed on Web pages alone. The latter titles are often maintained by the bibliographer only. In this environment, no matter the format, the organizational skills of a cataloger are vital to the access and use of information resources. Setting up the technology infrastructures to provide seamless access to these resources has not been without its
problems, from licensing and authentication issues, to workflow, presentation and maintenance issues. Personnel in technical services departments are frequently responsible for maintaining the accuracy of the library’s URLs to items on electronic collection Web pages or on catalog records.

While print materials continue to be the predominant format acquired by VMLs, an increasing number of full-text electronic journals, Web pages, e-books, and citation databases are being made available from VML Web sites (Figure 6), and these libraries can expect to be increasingly involved in organizing these materials for optimum subject access.

FIGURE 6  IOWA STATE UNIVERSITY VETERINARY MEDICAL LIBRARY HOME PAGE

Elsevier’s MD Consult service offers full text reference books and journal articles online. e-books are the newest means of accessing books, offering book length content in a digital format. Usually e-books are digitized versions of their print counterparts. Occasionally they originate and exist only in a digital form. Like print books, the text found in e-books is often enriched with photos, illustrations, graphs and tables. Readers can navigate through the text (e.g. easily search for specific passages) in ways not possible in print. netLibrary, founded in 1998, is a company whose business is to acquire
electronic distribution rights to thousands of books and make them available to users. The predominant method of accessing netLibrary titles is online through a library or personal Web browser. netLibrary hopes to be able to add other use options beyond the one book/one use model that is currently available. e-books are cataloged using the Books format and the Library of Congress Rule Interpretations for reproductions. At the ISU Library, the Monographs Acquisitions department imports the record into the online catalog, with netLibrary subsequently activating the 856 field link for access to the book. Examples of some e-books in the ISU Library collection, acquired through netLibrary, appear in Figure 7.

FIGURE 7  IOWA STATE UNIVERSITY VETERINARY e-books

Shedlock declares, “Electronic publications! The impact of e-book and e-journal services like MD Consult changes everything quickly!” (5)

ACCESS TO DIGITAL COLLECTIONS

A new and relatively unfamiliar area for many libraries is the digitization of objects such as paintings, sculptures, drawings, photographs or any other of many types of artistic creations. These Web-based collections can be used for teaching and learning in specific subject areas. Typically, a non-MARC based metadata scheme is used to organize,
describe, and provide access to the digital images. Available through the ISU Library’s home page “Multi-search” feature is a searchable collection of twenty digitized photographs showing historical depictions of horse drawn animal ambulance service, the Iowa State University Stange Veterinary Clinic, veterinary student instruction at the veterinary college, and various clinical procedures used in the first half of the 20th century. The creation of this database is truly a team effort at Iowa State. Personnel in the Information Technology Department provide database and digitization expertise, while the photographs are chosen and described by Special Collections personnel, who use metadata fields that list the context, place and time of the photographs. For subject access, Library of Congress subject headings were assigned by the cataloger who handles the veterinary subject area. Another example of a digitized database is the collection of images of poisonous plants created by the University of Illinois’ Veterinary Medicine Library staff in order to help veterinary students with identifying common plants that are toxic to animals in the Midwest. The database, designed to be revised and updated, is available at <http://www.library.uiuc.edu/vex/vetdocs/tocis.htm>.

BIBLIOGRAPHY


