

Managing the grey literature in veterinary medicine : challenges and opportunities

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Introduction

Many of us have stories to tell about the experience in pursuing obscure and nearly impossible references. When successfully identified and obtained, they give us great sense of accomplishment, but not everything ends in a success story. Try as we may to control them, the obscure publications and references manage to find their way into our lives. Questions about difficult citation or bibliographic identity are often posted on VETLIB-L, sometimes followed by a great deal of multi-national detective efforts.

This paper takes a close look at those obscure references collectively known as grey literature. We focus specifically on veterinary medicine and explore ways to enhance its understanding, management, and access through co-operative efforts. By increasing the awareness about grey literature, we hope to stimulate discussion and possible co-operation which could bring about tangible results to effectively reduce the problems.

According to Webster's dictionary (1), the word grey is an adjective that means "dull in color" or "lacking cheer or brightness" etc. Other definitions such as "dismal, gloomy, tedious and uninteresting" are also associated with this word. In the noun form, the word grey is defined as "any of a series of neutral colors ranging between black and white". This word so lacks distinction that an alternate spelling also exists. Publications, which share these color characteristics, are also undistinguished, subtle, and elusive. Yet, Chillag (2) estimates that the BLLD (British Library Lending Division) takes in over 140 000 such documents per year. This is not a negligible figure, nor are those publications unimportant.

Literature review

The importance of grey literature is also represented by an extensive number of articles written about them. There were even two international conferences solely devoted to this topic (3). Many of these articles point out the problematic nature of these publications, and stress the need for better access (4, 5). The variety of subject matter these articles address underscores the widespread nature of the problem. For example, grey literature is a concern for such subject fields as public policy (6),

geology (7), aquaculture and fisheries (8), economics (9), and health sciences (10). A few papers (2, 11) show how some organizations such as BLLD and International Atomic Energy Agency (IAEA) succeeded in making them accessible, and thus giving them more color.

Auger (5) states that the amount of grey literature varies from field to field, and the field of life science and medicine does not have as much grey literature as other fields such as technology, sociology, business, or education. Auger further states that this is due to the "primacy" of open publication in this field. In life science and medicine, even typical originators of grey literature such as public agencies, and societies and other organizations strive to publish their work in commercial or otherwise well-known publications. This presents an interesting contrast to the field of agriculture and food, which enjoy "a wealth of grey literature".

In examining the medical literature further, Alberani (10) and her colleagues concluded that grey literature made up 16% of the total number of references cited in their study. Mixed with the greyer field of agriculture, it can be speculated that the level of grey literature in veterinary medicine is definitely above 16%. This may be a manageable figure.

Characteristics

In order to be called "grey", publications must have, as their key features, a high level of obscurity and indistinction for reuse. Publications become obscure because they:

1. lack adequate bibliographic identifiers such as distinct title, author names, publisher, publication place and date, ISBN or ISSN, etc.;
2. have too many identifiers;
3. keep print stock small and use limited distribution routes;
4. are not acquired widely.

In general, publications with these features consist of reports, working papers, standards, theses, government documents of all levels, conference papers, society publications, newsletters, workshop syllabi, etc. It is important to note that the greyness of some publications is a relative matter. A publication perfectly clear in a given language can be totally grey to those who cannot read that language. Some society publications remain grey to outsiders even though they are well known to the members. Curiously, supplements to non-grey or open publications sometimes become grey when they lack clear bibliographic identity. Supplements to *Compendium on continuing education for the practicing veterinarian* are good examples in this case.

Grey literature does have some positive characteristics:

1. they apply existing knowledge to real problems and give practical solutions;
2. they give digested and summarized knowledge for the busy decision makers (12);
3. they are fast;
4. they are less costly to produce;
5. they have less restrictions and guidelines for contributors to follow;
6. they are open for communicating new developments and experimental approaches;
7. they often look at cross sections of subjects such as economic, social, moral, and scientific impacts of new developments.

Veterinary students, faculty members, and practitioners find grey literature valuable because of these characteristics. Workshop manuals are quick and easy sources for veterinarians to learn new drug applications, as well as how to use new instruments and procedures. Newsletter articles may alert and give advice to small animal clinicians about animals that suddenly become popular. A research result using a small sample might be published only as an abstract, yet it can become a corner stone for a new research for insightful faculty members. Using statistical data on production efficiency, food animal veterinarians can provide more effective diagnostic and treatment service to maximize the profitability for the producers.

Main types of veterinary grey literature

a) Association publications

The *1997 American Veterinary Medical Association directory* (13) shows a list of 353 veterinary related professional associations worldwide. Many of them issue conference proceedings and publish newsletters. A select number of them even publish occasional books and other forms of communications. Some organizations send complimentary copies of the proceedings of their annual meeting to libraries each year. In contrast, the publications from other organizations are either never available for purchase, or the organization is unable to deal with vendors of purchase orders from the universities, let alone standing orders or orders from other countries. CAB International and Veterinary Proceedings database provide fairly in depth indexing of conference proceedings, so the challenge with associations publications are mostly in procurement.

b) Theses and dissertations

In the US, the Ph.D. dissertations are well managed by the depository program established by the University Microfilms International, which in turn distributes information through Dissertation Abstracts. Relevant entries appear in the CAB International database as well. UMI provides copies of dissertations easily and at low cost. UMI's collection scope includes many schools outside the US. On the other hand, master's theses are often excluded by UMI. The master's theses, particularly by veterinarians who return to school for special training, are often only available at the school where the training was received. Copies of the master's theses may not always arrive in the library, making them identifiable but very inaccessible.

c) Newsletters

Newsletters pose challenges to librarians through the entire process from procurement to providing access. These are the ones that often end up in vertical files without ever seeing the light of day, but no one dares to discard them. The quality and long-term value of the contents vary from newsletter to newsletter. A sample OCLC check on one dozen randomly selected newsletters revealed that two of them were not locatable, and three of them were held by two or fewer libraries. There are, however, some gems among the sand and they often grow into full-fledged journals. For example, in 1993, *American Association for Swine Practitioners newsletter* became a highly successful journal, *Swine health and production*.

Government documents

Whether statistical or regulatory, veterinary medicine is closely tied to government activities. In the US, much of the information emanates from the US Department of Agriculture (USDA), but its various agencies and branches are so numerous that it adds much complication to the identification, acquisition, and organization of its publications. State and local publications are additional problems. Fortunately, the National Agricultural Library does a good job in indexing information into AGRICOLA, and the publications are fairly widely accessible from various libraries around the country. For international documents, AGRIS works well. Recent efforts on the part of USDA and its various animal health agencies to make full text information available gives much relief to librarians but older documents, particularly those from semi-government agencies such as extension and experiment stations, continue to remain a challenge.

d) Workshops and course syllabi

US veterinary schools often hold short courses and workshops. Instructional materials and papers given at those sessions create a great deal of problems for identification and access. Because the materials are not for sale or for distribution outside of the workshop, procurement of these materials are almost always by chance, namely, donation of old materials.

Management of grey literature

Managing grey literature is not a new problem for libraries and documentalists. It has always presented us with interesting challenges. But new technologies and improved means of global communication, such as the Internet and the World Wide Web, are helping us discover new and better ways to capture, save, control, index, and reproduce all information, including that of grey literature (14).

How can we, as veterinary librarians, more successfully manage the grey literature? Let's take a brief look at ways that information specialists in other fields are using technology to "tame" grey literature. We'll start by briefly looking at four non-veterinary models. Each is unique in its own way, yet all use common strategies and methods. Those models are:

- INIS - International Nuclear Information System
- SIGLE - System for Information on Grey Literature in Europe
- AIM - African Index Medicus
- Environmental Grey Literature Home Page

The first two examples, the International Nuclear Information System (INIS) and SIGLE, the System for Information on Grey Literature in Europe, are internationally sponsored products, with commercially maintained databases, which are also marketed in CD-ROM format. INIS also provides 95 000 full-text grey literature documents on microfiche. This collections, which is gathered by its 94-member countries and 17 participating organizations, grows at the rate of 20 000 record per year (11). The major function of SIGLE, which is sponsored by a European-based consortium of libraries, is to provide access to grey literature in all disciplines. Each of the 360 000+ records includes ordering and/or loan information (15). Like INIS, participants are both users

and contributors and have free access to the master database (16). Both are excellent models of international co-operation.

African Index Medicus (AIM)

AIM was created by AHILA, the Association for Health Information and Libraries in Africa, in response to need for researchers, health officers, and other health professionals to access the published and unpublished health-related information and research related to Africa. AIM includes research reports from international development and government agencies, locally generated health studies, surveys, reports on local meetings, and partially published or unpublished reports (17). Contributing countries send indexed bibliographic records, with abstracts, to the WHO Afro-Regional Office. Whenever possible, standard (non-grey) bibliographic information available from existing sources, such as MEDLINE, is used. The database is available free to members, and the printed AIM is available for non-members to purchase from AHILA.

The Environmental Grey Literature Home Page

This is a WWW database, which is sponsored by the University of Toronto (UT), and made searchable by keyword and browsable by title. Browsable fields include organization, call number, date and location (18). Unfortunately, since the closure of UT's Institute of Environmental Studies Library, this homepage is no longer being updated. There is a lesson to be learned here. Projects of this nature require continuing support and maintenance that sometimes one person, local sites can not continue to maintain.

Next let's take a look at a sampling of a few of the on-going grey literature efforts from our veterinary colleagues.

a) Veterinary Conference Proceedings database

Maintained by Jean-Paul Jette of the University of Montreal, the Veterinary Conference Proceedings database (19), is a database of bibliographic data at the article level from 143 proceedings of 31 veterinary conferences. New proceedings are actively solicited and the bibliographic information is entered into the WWW-accessible format. In September of this year the Veterinary Conference Proceedings will be combined with the Veterinary Table of Contents database, and the combined database will be fully searchable (20).

b) Veterinary Serials Happenings

For many years Trenton Boyd, Chair of the Serials Committee of the Veterinary Medical Libraries Sections of the Medical Library Association, has monitored the veterinary literature for new serials, title changes, cessations, etc. He shares his information in "Veterinary Serials Happenings", a regular column in *Highlights and news notes*, the VMLS newsletter. It should come as no surprise that quite a number of the titles reviewed fall into the category of grey literature.

c) European Veterinary Dissertations Project (EVD-Project)

This is a project started in 1992 by the Veterinary Library of Utrecht in co-operation with a private publisher (Theo Elsinghorst) Euroscience. More than 30 schools from 17 countries participated in 1996. Project publications include the *Current bibliography of European veterinary dissertations* journal and diskette. One member institution, the Veterinär medizinische Bibliothek of the Freie

Universität Berlin, has scanned about 1500 dissertation abstracts into their catalog. About ten full-text dissertations are currently available on-line via their www-OPAC (22).

d) ARTO - the Article Index of Finnish Journals

This database, which is available to participants at no charge, contains citations from Finnish veterinary journals and the Proceedings of the Finnish Veterinary Association, as well as references to all articles written by Finnish veterinarians since 1995. Citations from 1960-1995 are available in card form and could be entered if resources were available (23).

e) Prototype database for grey literature (in progress)

A project is underway to create a bibliographic database, with availability information, of veterinary grey literature. "Veterinary Serial Happenings" entries will be used as a starting point, with additional sources added as needed. Contact information on grey literature producers, such as veterinary associations, may be added at a later date. Such a database could conceivably be placed on the WWW as a grey literature home page, searchable by keyword or subject.

Discussion

Now that we have completed our brief review of grey literature projects, let's return to our original question: what steps can we take to better manage this unwieldy, yet important, class of veterinary information?

The following are three essentials for working towards our goal:

1. Co-operation which is essential for identifying, acquiring, cataloging, and providing access to grey literature on a global basis. It is simply too big a job for just one person, one institution, one country. You may recall that broad, international cooperation was an essential feature of the successful non-veterinary models reviewed.
2. Sharing information with colleagues is critical. For instance, announcing the availability of new publications from your institution or important new materials published by obscure, little-known publishers and discovered serendipitously, can provide invaluable assistance to your colleagues. This information can be shared through VETLIB-L, newsletters, or other means.
3. Technology lends itself to the management of grey literature. The Internet provides unlimited opportunities for facilitating co-operative ventures, improved bibliographic control, and universal, multi-level access. Gelfand writes that the web's contribution to grey literature provides new capabilities, freedom of scope, and the ability to "exclude no one except those who choose not to be connected" (14).

Recommendations

The following are specific suggestions for ways in which we, as veterinary librarians, can help in identifying, acquiring, cataloging/indexing, and accessing grey literature:

a) Identifying/Acquiring

1. Make it your responsibility to identify, locate, and acquire grey literature for your geographic area, whether your country, state or province. Wessels contends that the acquisition of grey literature can best be done in a country by organizations (and individuals) with experience in handling the material and contacting producers (24). For example, you could use your own personal and professional contacts in interacting/reaching out to organizations, societies, etc. within your institution or locality.
2. Work with producers, indexing organizations, and bibliographic utilities for ways to improve access, availability, and distribution of grey literature. Bichteler suggests that producers can do much to improve availability by better and more appropriate distribution and providing copies of publications to bibliographic services (7). Your role might be to simply suggest to an officer of an organization that libraries be provided with complimentary copies of the association's publications and then supplying a list of library mailing addresses.

b) Bibliographic control/cataloging

1. Improve bibliographic control by cataloging substantive grey literature for your library. If your library contributes its cataloging records to a bibliographic utility such as OCLC, this will provide a valuable means of access and identification to colleagues in libraries outside your institution, for literature that could turn out to be more critical to library users than some conventional sources (7).
2. Recommend to independent authors and associations that they request ISSN's and ISBN's for their publications, and submit copies of their publications to indexing and cataloging organizations, such as CABI, the National Library of Medicine, and the National Agricultural Library. Indexing and cataloging organizations play a vital role in making users aware of grey literature resources.

c) Accessing/document delivery

1. Be willing to loan materials or provide photocopies of grey literature to other libraries via conventional interlibrary loan, DOCLINE, etc.
2. Respond to inquiries from colleagues, whether by VETLIB-L, e-mail, or personal correspondence, whenever you can help. We all know how grateful our library users are when seemingly impossible questions are answered.

Conclusion

Grey literature offers useful, important information for our users. It is our responsibility as information managers to use our expertise and resources to make this information more readily accessible. By using technology for full-text archiving, hyperlinks, and other enhancements, we can help blur the distinctions between grey, black and white literature by making grey literature more accessible and manageable. We have proven that we as veterinary librarians can collect locally, act globally, think virtually, and work together to solve common problems and fulfill our goals. The challenge of grey literature is one that should not be ignored.

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