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Selecting and Evaluating Environmental Information Resources in Public Libraries

The Chicago Public Library's interest in the environmental sciences dates from March 1971 when it was announced that Montgomery Ward and Company was giving the library $25,000 to establish a special environmental sciences collection. This collection is to serve as a memorial to Aaron Montgomery Ward who played an instrumental role in the early efforts leading to the preservation of Chicago's lakefront. Chicago thus became the third large public library to formally establish a special collection dealing with the environmental sciences. Previously, the Denver and Minneapolis public libraries had embarked upon programs to develop special environment collections emphasizing, respectively, wildlife and conservation. In order to avoid duplicating the efforts of the Denver and Minneapolis libraries, the Chicago Public Library has chosen to concentrate on five specific areas of the environmental sciences: ecology; environmental health; the legal aspects of environmental problems; the causes, effects, and control of pollution; and problems of the urban environment. The Ward funds are being received at the rate of $5,000 per year over a five-year period and are being supplemented as far as possible by regular library funds. Although all of the material obtained so far for this collection has been printed, it is expected that audiovisual and other nonprint materials will eventually be included and play an important role in providing environmental information to the users of the Chicago Public Library. The reading levels provided by this collection range from introductory works for the beginning student and layman to advanced treatises for researchers with a special knowledge of and interest in the environmental sciences.

In attempting to cope with environmental information resources, librarians are faced with five basic problems: (1) the large amount of material

being produced; (2) the wide range of subjects covered by the literature; (3) the wide variety of material format; (4) the wide range of reader levels requesting the material; and (5) the frequently great expense of the material. Concerning expense, it need only be said that few libraries can even attempt to obtain everything being published in the environmental sciences. The Chicago Public Library is certainly not one of these; however, it is attempting to develop a strong environmental sciences collection emphasizing the subjects previously mentioned, and this material is available to other public libraries throughout Illinois through interlibrary loan.

No librarian should be surprised to hear that the amount of material being published in the environmental sciences has increased tremendously over the past several years. In order to gain a better perspective of this increase, two common bibliographic sources, the *Subject Guide to Books in Print* and the *Monthly Catalog of United States Government Publications*, were checked to determine the number of entries appearing under the headings of ecology, environment, pollution, and wildlife conservation during the period of 1962 to 1971. Fig. 1 shows the appropriate data for the *Subject Guide to Books in Print*.[1] The subject headings of ecology and pollution showed the greatest increase with the former climbing steadily from 32 entries in 1962 to 119 in 1971, and the latter climbing from 4 entries in 1967 to 81 in 1971. There were no subject headings for pollution before 1967. The number of publications concerned with wildlife conservation also increased significantly during the ten-year period but at a more gradual rate than ecology and pollution. This can undoubtedly be explained by the fact that concern with wildlife conservation did not just begin in the past few years but has been a matter of interest for many years. No entries appeared under the heading of environment until 1971, and this is probably indicative of the fact that the term environment has only recently come to have, for many people, a much more restricted meaning.

Beginning in 1967, the *Monthly Catalog of United States Government Publications*, as shown in fig. 2, showed a remarkable increase in the number of publications indexed under environment.[2] Prior to that year the term, as used by the Superintendent of Documents, had a much more restricted meaning such as spaceship and spacesuit environments. Entries under the headings of ecology and wildlife (the term wildlife conservation does not appear in the index) showed no dramatic increases but remained fairly constant. There were no entries under the heading of pollution until 1971, but forty-two entries appeared in that year. Prior to 1971 the term pollution was used only as a subheading under such subjects as air and water.

It will be useful to discuss some of the sources a librarian can use to learn of the availability and publication of environmental information material and what he can use as evaluation aids. What are the material selection aids

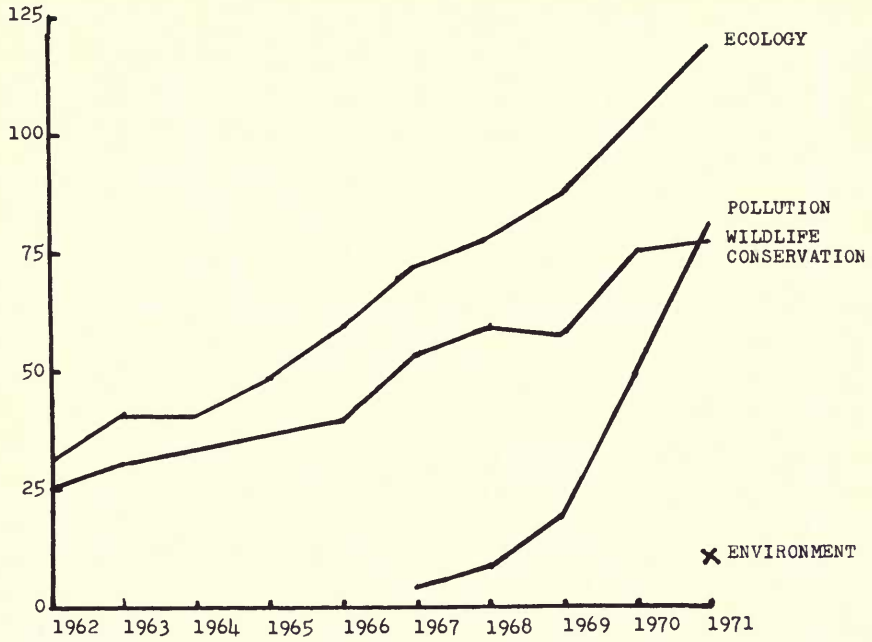

Figure 1. Number of entries in the *Subject Guide to Books in Print* for Four subjects During the Period 1962 to 1971

that list and describe environmental information resources? To answer this question a check was made of 356 order slips filed in the "books received file" of one department in the Chicago Public Library. Whenever a book is ordered for this library a 3 by 5 order slip is prepared listing the author, title, publisher, date, price, and the source of information. After the book has been received and processed the order slip is retained in the "books received file" for future reference. Thus, it was possible to check these to determine the sources of information for 356 titles received in the Ward Collection as of July 22, 1972.

The information obtained in this check is summarized in table 1. The results are surprising because *Books in Print* was given as the source of information for 94 percent of the 356 titles. The other sources given were the *AAAS Science Book List*, approvals from book jobbers, the journal *Ecology, Library Journal*, publisher's catalogs or announcements, and *Publishers' Weekly*. It is undoubtedly safe to assume that *Books in Print* can be interpreted to mean the *Subject Guide to Books in Print*. There is a logical explanation for the preference given to this selection tool. Because the order that brought the titles in question to the library had to be prepared in a very short period of time, the fastest possible way of finding appropriate titles was

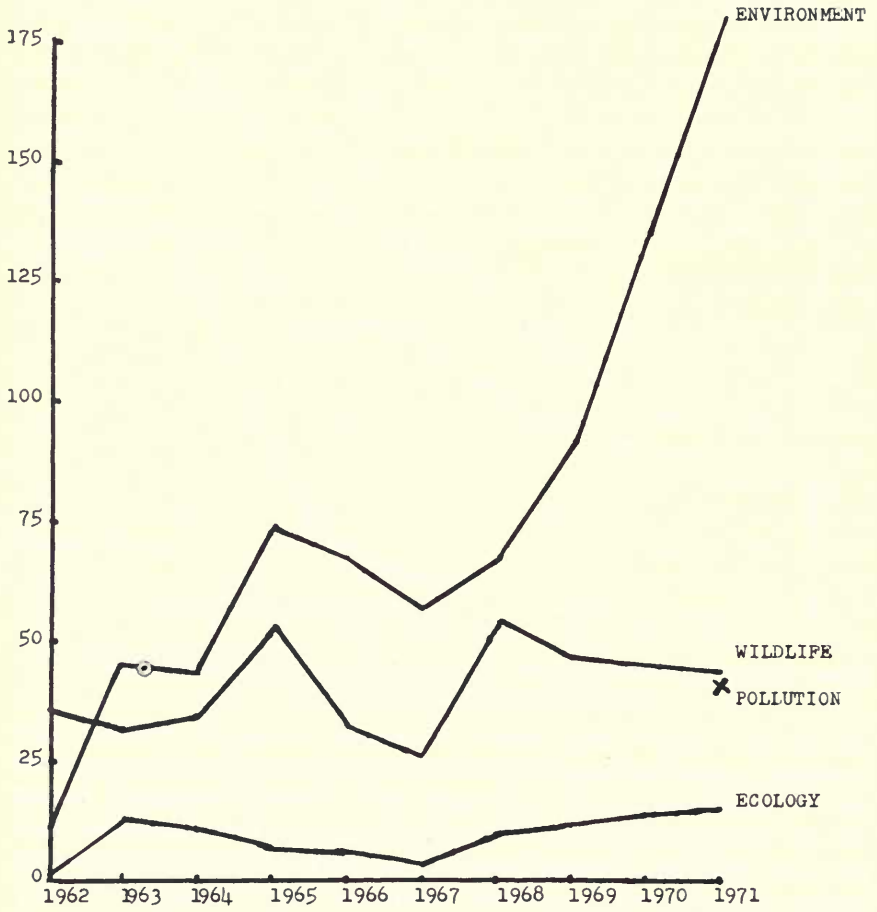

Figure 2. Number of Entries In the *Monthly Catalog of United States Government Publications* for Four Subjects During the Period 1962 to 1971

simply to make photocopies of the pertinent sections in the *Subject Guide to Books in Print*. These were then used as checklists to compare with the library's holdings. This procedure can be recommended as a good first step for any public library beginning to develop a collection of environmental information resources.

Another check similar to the one just described was made of a second group of titles–186 titles ordered by one department on March 27, 1972. This time the number of sources used increased to 142 with the following publications being added: *Bioscience, Choice, Ecology Today, Natural History,*

Source	Number of Citations
AAAS Science Book List	1
Approval copy	3
Books in Print	334 (94%)
Ecology	13
Library Journal	1
Publisher's catalog or announcement	3
Publishers' Weekly	1
Total	356

Table 1. Sources Cited for 356 Ward Collection Titles Added as of July 22, 1972

Source	Number of Citations	Percentage
Approval copy	11	5.8
Bioscience	2	1.1
Books in Print	20	10.8
Choice	8	4.2
Ecology	5	2.6
Ecology Today	2	1.1
Library Journal	8	4.2
Natural History	1	0.5
New York Times Book Review	1	0.5
Publisher's catalog or announcement	26	14.1
Publishers' Trade List Annual	22	11.8
Publishers' Weekly	61	33.1
Science	16	8.6
Science News	3	1.6
Total	186	100.0

Table 2. Sources Cited for 186 Ward Collection Titles Ordered March 27, 1972

the *New York Times Book Review, Publishers' Trade List Annual, Science,* and *Science News*. As shown in table 2, the major source of information was *Publishers' Weekly* which was used for 61 titles. *Books in Print*, publisher's catalogs or announcements, *Publishers' Trade List Annual*, and the journal *Science*, were grouped together next. Most of these titles will be familiar to librarians, and together they represent a good, although certainly not exhaustive, source of information on material being published in the environmental sciences.

Of the 13 titles listed in the two tables it is very likely that *Books in Print, Library Journal, Natural History, Publishers' Weekly, Science News,* and,

perhaps, the *New York Times Book Review* would be received by small public libraries, and these publications provided information on 430 titles out of the total of 540 involved in the check of sources. Medium-sized public libraries could be expected to receive, in addition to the latter group, *Bioscience, Choice, Publishers' Trade List Annual,* and *Science* which together yielded information on another 48 titles. In selecting material librarians prefer, of course, to base their decisions on reviews or personal examination of the material, but unfortunately, this is usually not possible. Of the 540 titles checked, only 14 were selected on the basis of an examination of an approval copy. Of the remainder, it is impossible to state how many reviews were available, but it is unlikely that more than a small fraction of them were selected on the basis of reviews. Most of the sources discussed publish reviews; however, even these reviews are representative of only a small portion of the total number of titles announced.

How, then, does one select a title when a review or approval copy is not available? This can best be answered by analyzing the data given in the announcements contained in the weekly record of *Publishers' Weekly*, the major source listed in table 2. *Publishers' Weekly* usually includes the following bibliographical data in announcing new titles: author, title, publisher, imprint, complete collation, Dewey and LC classification numbers, price, LC card number, and LC subject headings. Almost all of these items can be useful in selecting a work. Quite often the author will be recognized as being an important contributor to the literature of the environmental sciences. Ordinarily it will not be wise to rely on the title of a work as an indicator of the work's usefulness. It should generally be considered in combination with the author and the publisher. There are many well-known publishers producing environmental literature of high quality, but there are also some that must be regarded with suspicion, e.g., the vanity presses. A very useful indicator of a work's potential value is the collation. This will give the pagination of the work, in itself an important bit of information, and indications of illustrations, maps, and the size. The Dewey and LC classification numbers help to pinpoint the location of the work in the collection if it is selected. This is helpful because it may be that the collection is already strong in that particular area and there are other areas of greater priority. The LC subject headings are similarly useful. It is clear, then, that even with a minimum of bibliographical data it is possible to select intelligently.

Thus far this discussion of the selection and evaluation of environmental information resources has been limited to books. It is obvious to anyone dealing with environmental information resources that books represent only one of many forms of recording environmental information. Government documents, pamphlets and other vertical file material, periodicals, and audiovisual and other nonprint material are all important sources of information in

this field. Because at least one of the articles of this volume will be devoted to audiovisual materials, nothing will be said here concerning the selection and evaluation of this type of resource. However, it should be emphasized that audiovisual materials, because of their unique property of imparting ideas and concepts to groups of people as well as individuals, represent a major potential source of environmental information for public libraries.

In developing a collection of environmental information resources, government documents must be given some priority. This is true for federal, state, and local documents because these publications quite often are the only sources of information that deal with specific geographical areas and environmental problems. Also, some government documents are available at little or no cost and are, therefore, easily obtainable by any public library. On the other hand, because of the large output of government publications dealing with the environmental sciences, it will be difficult for most libraries to even attempt to develop comprehensive collections of this material. The solution to this problem is provided by depository libraries. The Chicago Public Library is a depository of federal and Illinois state documents, and these are available for loan to other public libraries in the state. Nevertheless, smaller libraries must be aware of the publication of specific documents, and this is best done through a subscription to the *Monthly Catalog of United States Government Publications* and LC's *Monthly Checklist of State Publications*. Even if no documents are purchased, these publications will give librarians and library users an idea of what might be available from a depository library. The LC state documents checklist is recommended even for small public libraries because it is the only source of reasonably up-to-date information about publications of all the states that may be of local interest and importance. With the exception of this one source, state documents are generally not very well controlled.

The problem of control is especially difficult for local documents below the state level. Some municipal public libraries and archives issue periodic checklists of city and, sometimes, county documents. Otherwise, the only way that librarians can find out about these publications is to become familiar with the local agencies that are concerned with environmental problems and request that the library be provided with copies of their publications or the necessary information for obtaining them.

Another potentially valuable source of environmental information is the pamphlet. Many government documents appear in this form; therefore, the *Monthly Catalog* and the LC state documents checklist will be helpful in locating material for the pamphlet file. Pamphlets often contain information that is not available elsewhere. Examples are reports of the activities of private environmental groups and policy statements of industries that are being accused of polluting the environment. In addition pamphlets are frequently

available at little or no cost if one knows where to get them. Two sources, the *Monthly Catalog* and the LC *Monthly Checklist of State Documents*, have already been mentioned, but the best known source of information on pamphlets is H.W. Wilson and Company's *Vertical File Index*.

The most up-to-date information about environmental problems is found in periodical literature. The selection of a particular periodical usually depends on whether or not it is indexed. There are many general and specialized indexes to periodical literature, and the best known of these, *Readers' Guide to Periodical Literature*, indexes dozens of general interest magazines that regularly report on important developments in the environmental sciences. This index, furthermore, covers several magazines that are primarily concerned with problems of the environment: *Audubon Magazine, Conservationist, Environment, Living Wilderness, National Parks & Conservation,* and *National Wildlife*. Most small public libraries receive *Readers' Guide to Periodical Literature*. Larger libraries might receive, in addition, the *Social Sciences and Humanities Index*, the *Business Periodicals Index*, and perhaps the *Applied Science and Technology* and *Biological and Agricultural* indexes, all of which index material of a more technical nature than *Readers' Guide to Periodical Literature*. Only the largest public libraries will receive such specialized indexing and abstracting services as *Biological Abstracts, Chemical Abstracts, Pollution Abstracts*, and *Water Pollution Abstracts*, but it is unlikely that more than a small percentage of the journals covered by these abstracting services would be received by a public library. For the highly specialized material of the environmental sciences it is necessary that public libraries of all sizes take advantage of interlibrary loan services and be aware of local special collections that may be available to the general public.

It is not always possible to find timely reviews for most new books. Often selection of a particular work must be based on nothing more than a brief description of the work such as can be found in the weekly record of *Publishers' Weekly*. Reviews can be found in many publications such as *Choice, Library Journal, Publishers' Weekly,* and *Science*, but even these do not always give a librarian a good idea of the potential value that a work may have in a particular collection. Ideally a librarian would be able to base his decision on whether to purchase a particular work on a personal review of a copy of the work. What, then, are the criteria that must be considered by a librarian in evaluating an approval copy of a work dealing with the environmental sciences?

It is really not necessary to set up any special criteria for evaluating environmental information material. There are many special contemporary problems that public librarians have to be concerned with in developing library collections, and in most libraries the material dealing with the environmental sciences can receive no more special consideration than that dealing

with drug problems, race relations, poverty, and other important issues. It is obvious then that in most cases a library's normal standards for selection and evaluation will be applied to environmental information resources. The *Materials Selection Policy* of the Chicago Public Library offers the following general criteria for selection:

> A new acquisition must be measured against other materials available to determine what purchase seems wisest in view of the Library's needs and the funds available. The selector takes into account such standards of selection as content, style, authority, format, and effective presentation. In each instance the selector must critically appraise the work, noting how well the idea is communicated to the recipient and how the material adds breadth and depth to the collection already at hand. The overall value of the material is the chief criterion of selection.[3]

These are valuable guidelines that can certainly be applied to the selection and evaluation of environmental information material; however, two points need to be elaborated. First, who will be the recipient of the material? Public libraries are expected to serve all reader levels. Although much of the material being published in the environmental sciences is technical in nature, there is also a substantial amount of literature in this field that is aimed at beginning and intermediate students and laymen. Small and medium-sized public libraries will normally be most concerned with this group. Large public libraries can expect to serve this group and, in addition, more specialized users such as businessmen, lawyers, advanced students, government officials and scientists. Thus, in developing an environmental collection each library will have to carefully define the collection's potential users.

Another point stressed in the Chicago Public Library's general selection criteria is the importance of a new acquisition adding breadth and depth to the collection. An interesting aspect of the environmental crisis and its literature is its pervasiveness. This is an important point to remember when considering ways in which the breadth and depth of a collection can be improved. In a given library the environmental information material may be primarily concentrated in one subject area or department, but it is equally likely that related material will be found throughout the collection. Thus, while the bulk of material may be found in the natural sciences, it can be expected that important additional material will be found in the technology section, the social sciences and legal section, the medical section, the business section, and even, in some instances, the humanities. Therefore, a library, by developing an environmental collection, will be contributing to the strength of the overall collection in many seemingly unrelated areas.

A final factor to consider in the selection and evaluation of environmental information resources in public libraries is that of priority. Considering the fact that public libraries constantly receive requests for more material and information in many different areas, how much priority can a library give to the development of a collection of environmental information resources? This

question needs to be preceded by an even more basic one: Is there really an environmental crisis? Few people today would say that there are no environmental problems or that those that do exist are of no consequence. In fact, the environmental crisis has now been taken up as an important issue by all segments of our population, and it seems that at least in the United States there is virtually unanimous agreement that humanity is faced with very serious environmental problems that will have to be solved.

It is absolutely necessary then that public libraries gather, organize, and provide for their patrons the information necessary for the development of an understanding of environmental problems. Since most public libraries will have to weigh their needs for environmental information material against their needs for material in many other subjects, this discussion has concentrated on the usefulness of basic material selection aids in providing information about available resources. Utilization of these basic selection aids will provide most public librarians with enough information to develop a well-rounded general collection of material that will fulfill the needs of most patrons. More advanced and specialized material will, hopefully, be available to public libraries in the state of Illinois from the four state reference and research centers. As one of these centers, the Chicago Public Library looks forward to playing an important role in helping the citizens of Illinois develop a greater environmental awareness.

REFERENCES

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2. U.S. Superintendent of Documents. *Monthly Catalog of United States Government Publications*. Washington, D.C., U.S.G.P.O., 1962-71.

3. Chicago Public Library. *Materials Selection Policy*. Chicago, 1970, pp. 7-8.