

# Where Are the Whale Books? Evaluating and Improving Juvenile Marine Science Collections

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Children learn from their immediate surroundings. They venture out into the world through backyards, school playgrounds, and neighborhoods. During these adventures, they explore the physical world, trying to figure out what makes light, why bugs squish, and where sand comes from. At different stages in their lives, they seek out different types of information as their cognitive skills develop (Piaget 1952; Carter and Abrahamson 1991). Libraries provide information to satisfy children's curiosity. If children do "learn when their concrete experiences are connected to their world" (Latrides 1993, 5), libraries should help them connect by providing good science books about their immediate environs. While there are standard works and com-

mon fascinations, every local library has a responsibility to emphasize the immediate environment, whether that is the mountains, the city streets, or the beach.

Good science books for children are readily available, but so are many inaccurate and inappropriate ones (Flatow 1991; Goldberg 1991). For many public libraries, especially smaller ones, building a collection that adequately addresses the local environment—the child's backyard—is problematic. Staff in many public libraries rarely have science backgrounds that would make selection easier. This lack of expertise coupled with tight collection budgets creates a challenge to find just the right books "that foster [children's] inquisitiveness, their curiosity, and their wonder" (Naracek 1993, 125). Even if the tools (e.g., "best books" lists and reviews) are used, how can a small library know when it has a "good" collection?

This study examined the juvenile marine science collections of ten public libraries on the Oregon coast

to assess if they adequately provided children with good science books about their backyards. While most of the libraries demonstrate a strong commitment to children's services, none has evaluated juvenile collections beyond monitoring general usage statistics and enlisting staff intuition. Describing adequacy proved difficult. Using a standard evaluation tool, a "best books" list, coupled with subject expertise, should have led to a clear assessment of the various collections. When it did not, more work was done to discover how to use such a list and other review sources to evaluate and build adequate local collections.

## Background

Collection evaluation relates the collection's purpose (e.g., promoting reading in young children) to the needs of potential users (e.g., children interested in their backyards) (Lancaster 1988). There is ample information on the process of evaluating collections (Lancaster 1988; Robbins and Douglas 1988; Roy 1992), although little targets children's collections (Collburn 1994). Tips on what makes a good science book and explanations of reviews and review sources are also well documented (Winkel 1986; Koblin 1988; Carter 1993; Van Orden 1995; Horning 1997). Applied information on assessing children's collections is scanty and definitions of adequacy inconclusive (Hippenhamer 1986; Roy 1992; Willitt 1992). Some studies suggest how to analyze the results of using a bibliography to check a collection for adequacy (Lancaster 1988; Nevin 1994; Doll 1995). Nevin's (1994) evaluation of a college's children's literature collection suggests that 33 percent of recommended titles

is adequate. Lancaster (1988) discusses a formula for grading academic library collections against a standard list; an "A" library has over 90 percent of the recommended titles while a "D" library has 50–59 percent.

While the percentage of recommended titles is critical (Robbins and Zweizig 1988), what happens when that percentage is faltered? How does it describe adequacy? Comparing the percentage to similar libraries can be helpful. In the end, however, a good nonfiction collection is built to respond to its own users' needs and collection goals. An "adequate collection" is an elusive goal with no clear answer on what it is and how it is achieved. Concrete examples would assist children's librarians to gain confidence in the use of "best books" lists to evaluate and improve their nonfiction science collections.

## Methods

### Compiling the List

A list of ninety-five marine science books published between 1992 and 1995 was compiled using three sources: *Science Books for Young People* (Phelan 1996), *Science Books & Films' Best Books for Children 1992–1995* (Cath and Sosa 1996), and four annual lists of outstanding science trade books for children published in the March issues of *Science and Children* ("Outstanding . . ." 1993, 1994, 1995, 1996). The producers of these sources sought books that are readily available (trade books), scientifically accurate, readable, and appropriate to the audience. The reviewers in *Science Books & Films* have strong science backgrounds and include scientists, librarians, and teach-

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TABLE 1  
Sources for the Best Books

	Titles on "Best Books" List	Unique Titles
Phelan (Booklist)	39	7
Science and Children	27	3
Science Books & Films <sup>1</sup>	51	22

ers. The lists from *Science and Children* are juried by a panel of teachers and librarians under the auspices of the National Science Teachers Association. Phelan (1996) bases her list primarily on reviews in *Booklist*.

From the compiled lists, several titles were removed because they were out-of-region for the Pacific northwest (e.g., coral reefs and the Atlantic coast) or addressed animals out-of-region (e.g., manatees). This process reduced the list to eighty-five (referred to hereafter as Best Books), of which six titles appeared in all three sources and an additional nineteen appeared in two of the three sources. A comparison of the sources appears in table 1.

The Libraries

The collections of twenty libraries were examined using online public access catalogues. Data in table 2 describe the libraries whose collections were examined. Ten of the sixteen libraries serving Oregon's coastal communities were selected for study. The service populations of these libraries vary significantly as do collection and budget size. This variety reflects the diversity of community libraries and was considered relevant to the study. Ten noncoastal libraries were selected that had comparable service populations to the ten coastal libraries. Just as the coastal libraries were physically located in coastal communities, the noncoastal ones

served rural to semi-rural Willamette Valley communities in Oregon.

Electronic catalogues, several accessible via Telnet, made evaluating the libraries' holdings easier. The Coastal Resource Sharing Network (CRSN) catalogue includes the holdings of five city libraries, one community college, one private elementary school, and two library districts all located on the central Oregon coast. For this study, the city libraries and the one district representing several cities were studied. The second catalogue, Coos County Library Service District's Coastline, covers eight public libraries on the southern Oregon coast of which three collections were assessed; the others are very small. The catalogues of Astoria Public Library and the Florence Public Library were searched. Nine of the noncoastal libraries' holdings were reviewed through the Chemeketa Cooperative Regional Library Service's catalogue. This union catalogue holds the records of nine libraries, most serving farming and light industrial populations in central Willamette Valley. The final noncoastal library, Fern Ridge, was included in the same catalogue as the Florence Public Library.

Checking the Collections

Each book was searched first by title and, if not found, by author. If still not found, a title keyword search or cor-

TABLE 2  
Selected 1995-96 Statistics (Oregon State Library 1997)

	Service Population	Collection Size	Adult Circulation	Juvenile Circulation	% Juvenile Circulation	Total Budget		% Juvenile Budget	
						Book	Juvenile	Book	Juvenile
<b>Coastal</b>									
Astoria	10,000	n/a	89,717	22,020	20	\$16,469	n/a	n/a	n/a
Bandon	5,517	25,000 (0)	63,771	13,960	18	21,897	n/a	n/a	n/a
Coos Bay	25,162	85,896 (0)	219,337	65,800	33	76,117	15	27	50
Florence	14,819	46,246 (0)	143,947	27,750	16	56,486	17	33	33
Lincoln City	10,916	43,837 (0)	108,083	16,822	13	41,266	25	33	33
Newport	16,668	59,052 (0)	157,818	53,730	25	50,575	25	25	25
North Bend	16,986	76,991 (0)	147,245	52,503	36	49,581	20	25	25
Tillamook	23,300	n/a	n/a	n/a	n/a	71,331	28	25	25
Toledo	6,053	26,847 (0)	42,098	28,259	40	20,306	40	35	35
Waldport	4,428	16,000 (0)	26,640	5,023	16	10,196	20	50	50
<b>Noncoastal</b>									
Dallas	21,322	55,310 (0)	120,438	62,529	34	\$30,339	n/a	n/a	n/a
Fern Ridge	9,850	24,282 (0)	61,158	19,701	24	11,479	n/a	n/a	n/a
Junction City	4,090	17,845 (0)	39,958	23,771	37	10,963	n/a	n/a	n/a
McMinnville	38,351	81,641 (0)	177,528	79,759	31	39,000	n/a	n/a	n/a
Monmouth	16,574	41,106 (0)	87,661	56,016	30	26,341	n/a	n/a	n/a
Mt. Angel	5,134	25,794 (0)	17,245	17,009	50	14,083	n/a	n/a	n/a
Newberg	17,179	46,547 (0)	92,921	67,854	42	35,647	n/a	n/a	n/a
Sheridan	7,185	19,185 (0)	n/a	n/a	n/a	10,673	n/a	n/a	n/a
Silver Falls	17,009	43,631 (0)	88,699	61,920	41	38,061	n/a	n/a	n/a
Woodburn	25,981	64,314 (0)	110,441	55,221	33	41,999	n/a	n/a	n/a

<sup>1</sup>=titles n-units

porate author search was done as appropriate. A library was credited with owning the book even when it was missing. Multiple copies were not recorded. For example, Tillamook County Library System has multiple branches and a bookmobile; these were all counted as one collection because purchasing is done centrally. All data were compiled in Excel spreadsheets and analyzed for patterns of collecting by grade level, publisher, publication date, and review source.

After this stage of searching, the CRSN collections were searched for more detail. These libraries appeared to have the best collections of the coastal libraries, and the union catalogue was the most accessible. The extended searching used the subject headings assigned to the Best Books. The results were reviewed by publication year and provided a snapshot of the juvenile nature science collections in those libraries.

TABLE 3  
Collection Levels

Service Population	Minimal %	Basic %	Intermediate %	Outstanding %
5,000-10,000	10	15	40	65
10,001-21,500	15	20	50	75
Over 21,500	20	35	60	85

#### Staff Surveys

Collection staff at eight of the coastal libraries were interviewed by phone about the tools used to identify and purchase children's science books.

They were asked about the collection budget, budget allocation, and the selection process. They were also asked what problems were encountered when collecting science books for children. Many of those interviewed mentioned *School Library Journal* as a much-used reviewing tool, so the titles on the list were checked to see if they were reviewed in *School Library Journal*.

#### Definitions

For a children's collection, adequacy can be seen as a set number of books on each selected topic, enough books on a topic to satisfy demand, or an intuitive feeling by the children's librarian about his or her clientele. For this study, adequacy was considered in several ways:

- Coastal/Noncoastal Comparison: A coastal library should have more books of the Best Books than a noncoastal library of similar size.
- Collection Level: The concept of "collection level" as described in the *Pacific Northwest Collection Assessment Manual* (Forcier 1988) was explored and adapted from the academic setting to the children's collection. Table 3 describes the

levels. It is important to note that a "minimal" collection is not necessarily a bad collection; a small library with a limited budget would have fewer books, but those few could be well chosen.

- Budget Allocation: The percentage of the collection budget spent on Best Books was also considered. Budget accounting by subject area and reading level is a rare occurrence in small public library budgets. This study relied on interviews with collection staff and published budget statistics to create a picture of nonfiction children's budgets.
- Quality: Adequacy was considered in terms of quality versus quantity. The entire marine science collections of the five CRSN libraries were examined to compare the percentage of Best Books to others purchased in the same time period. Price was also considered, as it is sometimes used as a determinant of quality.
- Diversity: A diverse collection is as important as a large collection of marine science books. If a library only collects marine mammal books and few on other marine topics, that collection would not reflect a broad approach to collections and interests. The Best Books list was divided into two parts—books on mammals and books on other topics. Diversity also suggests addressing the needs and tastes of all

TABLE 4  
% of Best Books Owned by Coastal and Noncoastal Libraries of Comparative Sizes

	Coastal	Noncoastal
5,000-10,000 Service Population		
Astoria	2.35	Fern Ridge 4.71
Bandon	10.59	Junction City 2.35
Toledo	21.18	Mt. Angel 1.18
Waldport	11.76	Sheridan 4.71
10,001-21,500 Service Population		
Florence	22.35	Dallas 12.94
Lincoln City	21.18	Monmouth 4.12
Newport	29.41	Newberg 16.47
North Bend	10.59	Silver Falls 10.59
Over 21,500 Service Population		
Coos Bay	10.59	McMinnville 14.12
Tillamook	15.29	Woodburn 3.53
Average	15.53	8.47
Median	13.53	7.65

children. The holdings of CRSN libraries were then examined for subject, age, and publisher bias.

#### Results

##### Evaluating the Collections

- Coastal/Noncoastal Comparison: Most coastal libraries do collect more marine books than their noncoastal counterparts (see table 4). On average, coastal libraries have 15.5 percent of the Best Books while noncoastal libraries have 8.5 percent. The median for coastal libraries is 13.5 percent compared to 7.6 percent for noncoastal. Smaller libraries appear to collect proportionately more than the larger libraries with service populations over 21,500.

- Collection Level: Four libraries (Florence, Lincoln City, Newport, and Toledo) have a basic collection. None has intermediate or outstanding collections.
- Budget Allocation: Most of the libraries studied allocated materials funds based on circulation statistics. The juvenile allocations ranged from 20 percent to 50 percent of the total budget, percentages consistent with local circulation as well as national trends (Gertzog and Beckerman 1994). While national estimates suggest 50 percent to 85 percent of juvenile circulation is nonfiction (Carter and Abrahamson 1991), suggested allocations for juvenile nonfiction are lower at 35 percent to 40 percent of the juvenile budget (Gertzog and Beckerman 1994). The coastal libraries surveyed spend 25 percent to 50 percent of

TABLE 5A  
Annual Cost for Improving Collections

	Basic Level	Intermediate Level	Outstanding Level
5,000-10,000 Service Population	\$ 44.53	\$116.45	\$187.00
10,001-21,500 Service Population	58.23	147.28	219.20
Over 21,500 Service Population	102.75	174.68	246.60

their juvenile funds on nonfiction. Although there is variation between libraries, on the whole most of these libraries appear to budget adequately for juvenile nonfiction. The strongest collections consistently, though minimally, collected Best Books year after year.

Actual purchases were compared to possible purchases. All of the Best Books could have been purchased for \$1,164 over four years at an average cost of \$13.70 per title. Table 5A shows the actual cost to collect at various levels while table 5B relates those costs to each library's budget. Based on 1995-96 budgets, the portion of juvenile nonfiction budgets actually spent on Best Books (based on the average cost) is low when compared to what would have to be allocated to create better collections. The data also point out the wide variety in budgets; given this variety, the most useful observation is perhaps that more budget analysis may help staff track expenditures and consciously build their collections at levels appropriate for their institution. Some may choose to build outstanding collections while others will maintain basic ones.

• **Quality:** Table 6 indicates variety in the age and size of CRSN collections. On average, 50 percent of 1992-96 collections consisted of Best Books. An outstanding collection would have a higher percent-

age of Best Books. Price did not appear to be a determining factor in purchases.

• **Diversity:** The collections reflect little bias toward marine mammals, suggesting broader approaches of collecting than might be anticipated (see table 7). There also did not appear to be a bias by age group.

The Best Books represent forty-three publishers; twenty-three publishers had one title on the list, nine had two, three had three, six had four, one had five, and one had six. As would be expected, the publishers with more titles are collected more widely. On the whole, the patterns in this study did not reflect a bias towards one publisher over another.

**Using the Review Tools**

While there is an awareness of the need to collect marine science titles, the staff do not appear to use the review tools effectively to build outstanding collections. None of the libraries studied relied on the three sources used to compile the Best Books list. In interviews with staff, *School Library Journal* was the most mentioned review source. Three libraries mentioned the annual list published in *Science and Children*, and only one mentioned *Science Books & Films*. While a variety of resources

TABLE 5B  
Actual and Proposed % of Juvenile Nonfiction Budget for Marine Science

	1995-96				
	Juvenile Nonfiction Budget	% Spent on Marine Science in 1995-96	% Needed for Basic Collection	% Needed for Intermediate Collection	% Needed for Outstanding Collection
5,000-10,000 Service Population*					
Toledo	\$2,843	2.1	1.6	4.1	6.6
Waldport	1,020	3.4	4.4	11.4	18.3
10,001-21,500 Service Population					
Florence	\$5,000	1.3	1.2	2.9	4.4
Lincoln City	3,400	1.8	1.7	4.3	6.4
Newport	4,172	2.1	1.4	3.5	5.3
North Bend	2,500	1.2	2.3	5.9	8.8
Over 21,500 Service Population					
Cows Bay	\$3,000	1.4	3.3	5.6	8.0
Tillamook	5,000	.6	2.1	3.5	4.9

\* Figures not available for Astoria & Bandan

were mentioned, these well-regarded specialized tools were not commonly used. Libraries include Florence, Lincoln City, Newport, Tillamook, and Toledo as these had the highest percentage of Best Books in their collections. It appears that libraries could ignore the specialized recom-

Table 8 compares the Best Books owned by five of the libraries to the four review tools studied. The five

TABLE 6  
Age and Quality of Selected Collections

	Lincoln City	Newport	Tillamook	Toledo	Waldport
Total Juvenile Marine Science Books	71.0	83.0	85.0	54.0	34.0
Pre-1980 Publication Date	14.0	17.0	33.0	6.0	10.0
1980-91	21.0	20.0	25.0	18.0	5.0
1992-95	3.0	46.0	27.0	30.0	19.0
Best Books (1992-95)	18.0	25.0	13.0	18.0	10.0
% of Best Books in Recent Purchases	50.0	54.3	48.2	60.0	52.6

TABLE 7  
Diversity of the Collections

	Florence	Lincoln City	Newport	Tillamook	Toledo
Mammal Best Books in the Collection (34 titles/40%)	5 (26%)	4 (22%)	13 (52%)	2 (15%)	6 (33%)
Nonmammal Best Books in the Collection (51 titles/60%)	14 (74%)	14 (78%)	12 (48%)	13 (85%)	18 (67%)

mended list and only use *School Library Journal* to develop basic collections. For example, for two of these five libraries, almost 100 percent of the Best Books titles purchased were reviewed in *School Library Journal*. If *Science Books & Films* is added, the vast majority of all five libraries' purchases appear.

The results question the utility of seeking out the specialized review tools; using *School Library Journal* appears to be a simple way to build an outstanding collection. Yet, two issues arise as problematic—number and quality of reviews. Several librarians surveyed mentioned the

overwhelming number of reviews and their lack of time to wade through them. This situation would indicate a need for specialized lists

TABLE 8

Comparison of Review Sources to Actual Purchases

Review Sources	Florence	Lincoln City	Newport	Tillamook	Toledo
A: <i>Theelan (Booklist)</i>	9	13	14	6	9
B: <i>Science and Children</i>	14	9	14	8	7
C: <i>Science Books &amp; Films</i>	10	5	12	4	12
D: <i>School Library Journal</i>	13	17	17	13	15
A and D	15	18	21	13	16
B and D	16	17	19	13	15
C and D	18	17	23	13	18
A and C	14	15	20	7	15
B and C	19	13	22	10	16
A and B	16	16	20	12	13
Best Books Owned	19	18	25	13	18

TABLE 9  
Coverage of Best Book Titles by Individual Review Tools and Combinations (% of Best Books List)

OR	<i>Theelan (Booklist)</i>	<i>Science and Children</i>	<i>Science Books &amp; Films</i>	<i>School Library Journal</i>
<i>Theelan (Booklist)</i>	39 (46%)			
<i>Science and Children</i>	52 (61%)	27 (32%)		
<i>Science Books &amp; Films</i>	75 (88%)	69 (81%)	51 (60%)	
<i>School Library Journal</i>	59 (69%)	53 (62%)	75 (88%)	48 (56%)

and if combined with *School Library Journal*, reviews of 88 percent of the Best Books would have crossed a selector's desk. Common sense suggests that using the specialized review tools would help to build outstanding collections. For example, if a library only used the *Science and Children* annual list and conscientiously bought every marine science book on it, all but the largest libraries would have a basic collection (32 percent of the Best Books) using the collection levels in table 3. Combining any two of the sources would lead to at least an intermediate collection.

### Conclusions: Improving the Collections

Making good science books readily available to children takes tools, funds, and commitment. As this study illustrates, tools exist to assist in the building of well-rounded, current marine science collections. Consistent use of a variety of standard and specialized reviewing tools appears to be the best way to find good science books. Collections built from a reliance on one or two sources are not as good. The expertise of scientists, teachers, and other librarians, reflected in the careful selections for

recommended lists, can be enlisted, relieving the staff of a small or medium-sized library from the burden of needing to know every subject. Librarians indicate a willingness to use specialized lists when readily available (e.g., on their desk). Efforts should be made to get local libraries on the mailing lists for the specialized lists; such efforts could be undertaken individually, through a state entity, or simply by other librarians with subject expertise who recognize a useful tool and will take the time to pass it on. Making sound collection decisions using readily available tools greatly enhances children's access to information (Harrington 1993).

While the tools for selection exist, the funds for purchases are often lacking. Increased demand makes it easier to get administrators to re-examine traditional budget allocations. Creating demand is both a curse and a blessing, but without it, great books can languish on the shelf, or never even get there. Children's staffs of coastal libraries should consider story times and summer reading programs with a focus on the ocean and seashore. Librarians can work with educators to encourage science curriculum inclusive of local as well as exotic environments. More research on the ac-

tual use of juvenile nonfiction collections would help library staff shape collection budgets. For instance, tracking usage of nonfiction collections through circulation statistics would give the children's librarian information when deciding whether to purchase a biography or a science book. Usage and demand are powerful motivators for budget decisions.

The commitment to making good science books available is reflected in strong collection goals and consistent evaluation of the collection. Regular review of the collection statement can be used to verify its value and to direct purchases. The goals should articulate what levels the library wants to achieve in selected parts of the children's collection. Then, ways to evaluate progress towards those goals should be pursued. This study suggests one concrete way to evaluate a collection—checking holdings against a compiled Best Books list, and adopting basic, intermediate, and outstanding levels by percentage of titles owned. Surveys designed to measure the satisfaction levels of young users, parents, and teachers should also be considered (Robbins and others 1990). Evaluating collections helps improve them while demonstrating their utility.

Building good juvenile marine science collections happens over time. It reveals the staff's willingness to direct users to a wide range of literature including science about their local environments (Carter and Abrahamson 1991). The true test of good marine science collection is when children can find the book that explains why waves crash and how fish swim. At that point, the library has helped satisfy their curiosity by providing information about their backyards.

#### WORKS CITED

- Biley, Dorothy. 1993. "The Impact of Reviewing on Children's Book Publishing." In *Evaluating Children's Books: A Critical Look*, edited by Betsy Hearne and Roger Sutton. Urbana-Champaign: University of Wisconsin, Graduate School of Library and Information Science, 105-17.
- Carter, Betty. 1993. "Reviewing Nonfiction Books for Children and Young Adults: Stance, Scholarship, Structure." In *Evaluating Children's Books: A Critical Look*, edited by Betsy Hearne and Roger Sutton. Urbana-Champaign: University of Illinois, Graduate School of Library and Information Science, 59-71.
- Carter, Betty, and Richard F. Abrahamson. 1991. "The Role of Nonfiction in the Development of Lifetime Readers." *Journal of Youth Services in Libraries* 4, no. 4 (Summer): 363-68.
- Colburn, Nell. 1994. "10 Tips for an Outstanding Children's Collection." *School Library Journal* 40, no. 9 (September): 130-33.
- Duall, Carol A. 1995. "School Library Media Center and Public Library Collections and the High School Curriculum." *Collection Management* 20: 99-114.
- Flatow, Ira. 1991. "Reflections on Science, Children, and Books." In *Vital Connections: Children, Science, and Books*, edited by Wendy Saul and Sybille A. Jagusch. Washington, D.C.: Library of Congress, 71-76.
- Forcier, Peggy, ed. 1988. *Pacific Northwest Collection Assessment Manual*. 2d ed. Salem, Ore.: Oregon State Library Association.
- Guth, Tracy, and Maria Sosa, eds. 1996. *Science Books & Films' Best Books for Children 1992-1995*. Washington, D.C.: American Association for the Advancement of Science.
- Gertzog, Alice, and Edwin Beckerman. 1994. *Administration of the Public Library*. Metuchen: Scarecrow Press.
- Goldberg, Lazer. 1991. "Gaps and Emphases." In *Vital Connections: Children, Science, and Books*, edited by Wendy Saul and Sybille A. Jagusch. Washington, D.C.: Library of Congress, 31-46.
- Harrington, Janice N. 1993. "Children's Librarians, Reviews, and Collection Development." In *Evaluating Children's Books: A Critical Look*, edited by Betsy Hearne and Roger Sutton. Urbana-Champaign: University of Illinois, Graduate School of Library and Information Science, 27-36.
- Hippenhammer, Craighton. 1986. "Managing Children's Library Collections through Objective Data." *Top of the News* 42 (Spring): 309-13.
- Horning, Kathleen T. 1997. *From Cover to Cover: Evaluating and Reviewing Children's Books*. New York: HarperCollins.
- Jartrides, Mary D. 1993. *Teaching Science to Children*. 2d ed. New York: Garland.
- Kohryn, Beverly. 1988. "How to Judge a Book by Its Cover: And Nine Other Clues." *School Library Journal* 35 (October): 42-43.
- Langster, EW. 1988. *If You Want to Evaluate Your Library. . . .* Champaign, Ill.: University of Illinois, Graduate School of Library and Information Science.
- Maracek, Miriam. 1993. "Science Books for Young Children." In *Teaching Science to Children*, 2d ed., edited by Mary D. Jartrides. New York: Garland, 125-78.
- Newin, Suzanne. 1994. "Evaluating the Children's Literature Collection: A College Library's Experience." *Collection Management* 19: 127-33.
- Oregon State Library. 1997. 1995-1996 Public Library Standards—With Population Served. Online. Available: <http://www.osl.state.or.us/libdev/publibstat.html>. Accessed March 16, 1998.
- "Outstanding Science Trade Books for Children in 1992." 1993. *Science and Children* 30, no. 6 (March): 26-35.
- "Outstanding Science Trade Books for Children for 1994." 1994. *Science and Children* 31, no. 6 (March): 30-37.
- "Outstanding Science Trade Books for Children for 1995." 1995. *Science and Children* 32, no. 6 (March): 24-29.
- "Outstanding Science Trade Books for Children for 1996." 1996. *Science and Children* 33, no. 6 (March): 32-38.
- Phefan, Carolyn. 1996. *Science Books for Young People*. Chicago: American Library Association.
- Fragel, Jean. 1996. *The Origins of Intellectual Universities*. New York: International Universities Press.
- Robbins, Jane, and Douglas Zweizig. 1988. *Are We There Yet?: Evaluating Library Collections, Reference Services, Programs, and Personnel*. Madison, Wis.: University of Wisconsin, School of Library and Information Studies.
- Robbins, Jane and others. 1990. *Evaluation Strategies and Techniques for Public Library Children's Services: A Sourcebook*. Madison, Wis.: University of Wisconsin, School of Library and Information Studies.
- Roy, Lorraine. 1992. "Collection Evaluation as Research." *Journal of Youth Services in Libraries* 5, no. 3 (Spring): 297-300.
- Van Orden, Phyllis J. 1995. *The Collection Program in Schools: Concepts, Practices, and Information Source*. 2d ed. Englewood: Libraries Unlimited.
- Willitt, Holly G. 1992. "Designing an Evaluation Instrument: The Environment Rating Scale in Process." *Journal of Youth Services in Libraries* 5, no. 2 (Winter): 165-73.
- Winkel, Lois. 1986. "Developing Collections to Serve Children: The Tools of the Trade." *Catholic Library World* 57 (Jan./Feb.): 172-77.