RSS

"RSS gets you found in places you normally wouldn't be found."

—Jenny Levine, Conversation, Community, Connection, and Collaboration:
Practical New Technologies for User-Centered Services Roadshow

Part 1: RSS in Libraries

RSS has been one of the most talked about, presented about, and utilized technologies of late. Listen closely to the plugged-in librarians who chat about "their Bloglines" or say, "I get that feed, too." They're using RSS to access content from blogs, news sites, and other Web pages—with a one-stop-shop method poised to change the way we, as individuals, "get to" most of our online content.

According to Wikipedia, RSS is "a family of web feed formats, specified in XML and used for Web syndication. RSS is used by (among other things) news [Web sites], weblogs and podcasting."[1] The Wikipedia entry lists the various abbreviations used to refer to RSS:

- Really Simple Syndication (RSS 2.0)
- Rich Site Summary (RSS 0.91, RSS 1.0)
- RDF (Resource Description Framework) Site Summary (RSS 0.9 and 1.0)
- Real-Time Simple Syndication (RSS 2.0)

In plain English: RSS lets you create content in one place and display it in other places, such as in RSS aggregators (also called "readers"), which pull in various subscribed feeds to let you read them in one place. It is the back-end of XML-encoded content—from a blog or other source—that sits on the server behind your Web presence; therefore, the easiest way to think of RSS is as the first abbreviation listed above—*Really Simple* **Syndication**. Whenever the source gets updated (whether it's a blog post, your calendar of events database, or a more static HTML page), the RSS feed gets updated and any aggregator subscribed to that feed is notified there is new content available.

"RSS File Format," Wikipedia Definition, June 2006
http://en.wikipedia.org/wiki/RSS_(protocol)

Scripting News
http://scripting.com

"Automated Web Surfing," by Dave Winer
www.reallysimplesyndication.com/2005/09/11

My favorite definition, and one that's useful for teaching RSS to folks who have no experience with it, is from Dave Winer, one of the pioneers of RSS technology and a blog author at *Scripting News*: "When people ask me what RSS is, I say it's automated web surfing. We took something lots of people do, visiting sites looking for new stuff, and automated it. It's a very predictable thing, that's what computers do—automate repetitive things."[2]

Libraries should provide RSS feeds for three simple reasons that we'll explore in this chapter:

- So anyone (including you) can slice and dice your content in multiple places!
- So your audience can subscribe to your feeds with an aggregator!
- So your staff can subscribe to your feeds and other resources!

Slicing & Dicing!

With some simple code, an RSS feed can be "grabbed" from its source and displayed on other Web pages within the library's site—or anywhere: a university Web site, community portals, organization pages, and more. Slicing and

dicing the code allows information to be mashed up in new ways. Even better, it means your library's content can now go out where *your users are*. Until recently, library content and resources could only be used library Web sites, in our proprietary resources (i.e., our catalogs, our databases, our Web sites). With the advent of RSS, however, now our content can be subscribed to and displayed everywhere, and users are no longer forced to remember to come to our sites.

What can libraries do with RSS?

- Display other feeds on your library's site, such as a news feed for top headlines;
- Syndicate your existing resources; for example, provide feeds of new materials added to your catalog and other library content; and
- Let patrons slice and dice library content!

What type of content could a library push out, via feeds, from its Web site, making it available for users to subscribe to through an aggregator or for inclusion on other Web sites? Here are few suggestions:

- news
- events
- new book lists
- readers' advisory recommendations
- resources for researching current events
- images
- assignment alerts
- new resources and databases
- podcasts!

And the easiest way to do it is to start a blog!

All about Aggregators

The aggregator is the key to "automated Web surfing." An aggregator manages a user's subscriptions to RSS feeds from various sources and updates with new content automatically. This is one of the most important tools of Web 2.0, as it allows the user to quickly and efficiently read multiple sites in one place, rather than forcing him or her to manually click on every site, in hopes of finding new content.

One powerful use of RSS feeds from blogs, news sites, and other sources is as a current-awareness/news-monitoring tool. One of the most beneficial tools I added to my personal librarian's arsenal is the Web-based aggregator Bloglines. At the *Computers in Libraries* Conference in 2003, I heard Steven Cohen and Jenny Levine speak about RSS and "keeping current." I came back to the St. Joseph County Public Library and immediately planned classes

Figure 11:
Illinois Clicks Index page. Notice the *Chicago Sun-Times* news headlines feed displayed on the right side of the page (www.illinoisclicks.org).

on how to use aggregators in order to be in the know.

Imagine (remember?) the time before RSS: You'd arrive at your library, go to your computer, and visit ten to fifteen of your favorite Web sites (news pages, library sites, librarian blogs, and so on). The problem, of course, was that you never were sure if there was new content, you would have to deal with pop-up ads, and you would need to have a great deal of time available to manually click through to each site.

Now imagine this automated Web surfing concept with RSS: using this new tool, the aggregator does all of the work, checking each of your subscriptions every hour to see which sites have new content. Whenever there is something new, the aggregator brings in the new content for you to read. Instead of fifteen manual clicks (of hoping for something new), you just click once to log in to your aggregator and scan for new items (sites with new content are listed in bold type so they are easy to spot). The efficiency of this approach makes it a perfect current-awareness tool, especially for information junkies like librarians!

Popular Aggregators

RSS aggregators come in two varieties: Web-based and desktop versions. One of the most popular Web-based readers is Bloglines, a free, aggregator owned by the Ask company. Others include NewsGator and Google Reader. Desktop or client-based solutions include NetNewsWire (for the Macintosh) and BlogBridge, which runs in Java and includes a choice to pre-populate the reader with selected feeds by experts—including *Librarian's Weblogs* list maintained by Jenny Levine!

For a list of more Web-based RSS aggregators, see "The State of Online Feed Readers" by Frank Gruber (www.techcrunch.com/2006/03/30/the-state-of-online -feed-readers).

Taking Advantage of RSS for Library Services

RSS has some other definite advantages as well. Paired with a blog, an RSS feed can put your library's content where it can already be found—in search engines such as Google, of course—as well as in these RSS-specific search engines, such as:

- Feedster, www.feedster.com
- PubSub, www.pubsub.com
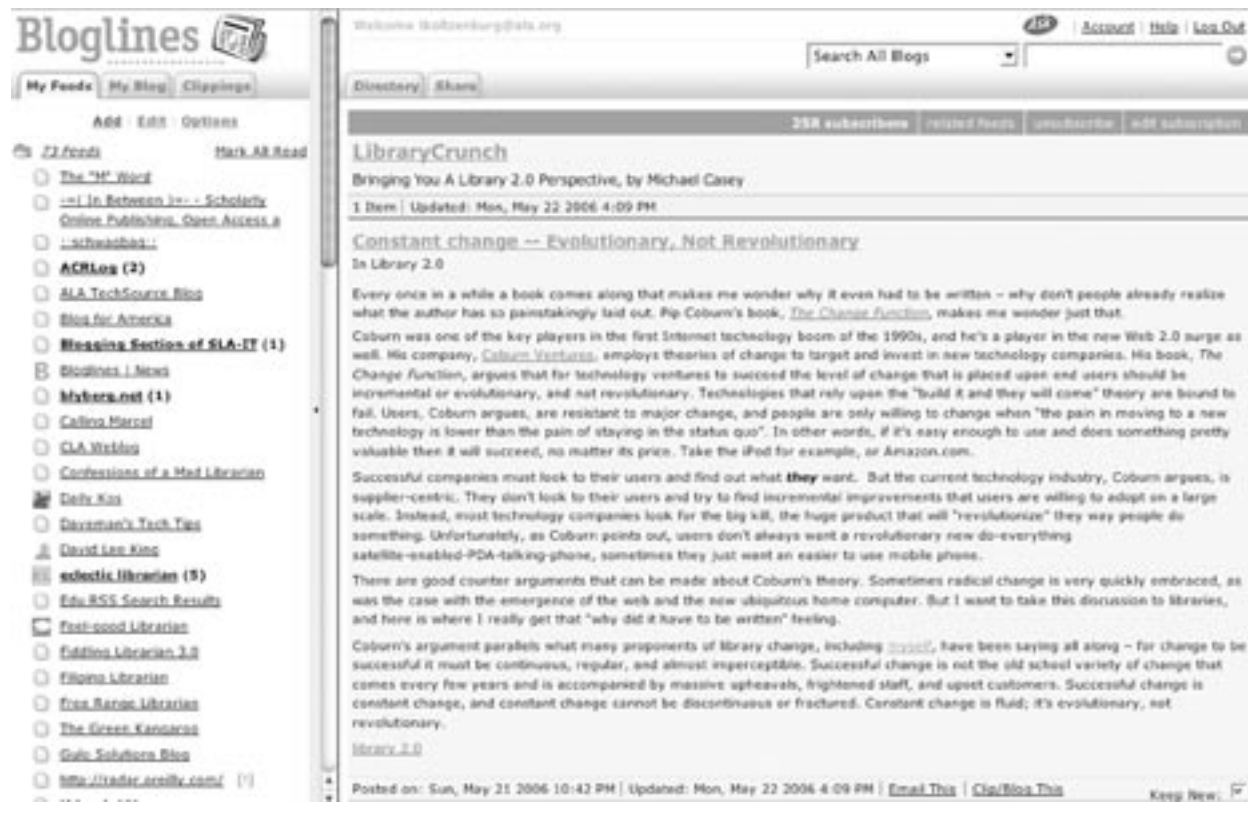- BlogPulse, www.blogpulse.com
- Technorati, www.technorati.com

Figure 12:
Bloglines is a popular RSS feed aggregator (www.bloglines.com).

In addition, the new RSS search engines offer much more current results, because they can index your content whenever your RSS feed is updated (as opposed to Google's less frequent indexing of your HTML pages).

As Karen G. Schneider noted in her Free Range Librarian Blog "Lists Versus Blogs: Wait and See" post, "Donning my Librarian Internet Index hat, we had a remarkable education when we added RSS feeds. Now people find us through the blog-finding agents. Librarians, including me, suck at marketing, but by adding RSS feeds, we stumbled onto a way for the audience to find us, instead of the glacially slow process of dissemination through our existing readership."[3] In other words, it is good to be found in as many places as possible, especially those places that index the most current content.

In "Taking Advantage of Web and Library 2.0" on his blog (Blyberg.net), John Blyberg, network administrator and lead developer at the Ann Arbor District Library, Ann Arbor, Michigan, wrote:

> You might as well face the fact that if you develop something that generates content, RSS

or Atom feeds will need to follow. Libraries and RSS make very good bedfellows as the endless discussion about it shows. Judicious use of feeds is the key. Having a prefabricated routine for generating these feeds is a very good idea, especially if you plan to create a lot of them.

There are a number of determinations you need to make when creating a library feed. Of course, there may be other questions you want to ask. I'm pointing these out because you'll need to think about some of this as you develop these services.

1. Determining what should go in the feed. What content is suitable for syndication?
2. How should the feed be formatted? What should the feed content look like? Often times you'll want feed data to be presented differently from the way it is on the Web.
3. How often should the feed be updated? Will the feed update nightly, hourly, or as content is generated? If a lot of content is generated on a regular basis, you might want to consider digesting it so you don't annoy subscribers.
4. Will feed items update? Will pre-syndicated items update or will an update spawn another RSS story?[4]

How Are Libraries Using RSS?

The key to getting your content out there via RSS is to use tools that automatically generate feeds (such as most blog software) or to have a programmer (on staff or on contract) to create feeds from your existing resources. The whole point is efficiency and recycling content you are already generating. For example, libraries that already have an online calendar of events would benefit from providing feeds out of it in order to syndicate their events on other local Web sites or in users' aggregators. Let's look at one model library that has helped pioneer library-generated feeds.

RSS at Hennepin County Library

The Hennepin County Library (HCL) in Minnesota offers a variety of feeds from almost every piece of the library's database-driven Web site. Right on the library's home page is an RSS button for library news. The HCL librarians also maintain subject guides on a number of topics, and each guide has its own RSS feed. In addition, the HCL calendar of events provides feeds for keyword searches as well as searches by program type (such as story time, book events, events for teens). And as if that isn't enough, HCL staff members have programmed homemade feeds from HCL's online catalog. Run any keyword search in the HCL catalog, and at the top of the search results, you'll find an RSS button that lets you *subscribe to* or *syndicate* that search.

Want to know when anything related to *The DaVinci*

Code is added to the catalog? Just perform a keyword search, grab the URL of the RSS feed, and add it to your aggregator. The next time a member of the HCL staff adds a record with that phrase in it, you'll be notified! In fact, add any of these HCL feeds to your aggregator, and you'll no longer have to come to the HCL Web site to get new HCL content—it comes to you, instead of forcing you to come to it!

On our Roadshow tours, Jenny Levine provides a handout to audience members, which includes the following RSS feed-display instruction:

> The first method is the easiest, especially for those libraries that don't have their own server or techie to install and configure software. Just plug the URL for an RSS feed into the site's form, and it will generate the necessary code to display headlines from the feed. All you have to do is copy that code and paste it into your own HTML page. Once live on the web, headlines from the RSS feed will appear on your page and will magically update every time the original site adds new content!
>
> The downside? You're dependent on someone else's service, so if it goes down, the headlines won't display on your page. Even worse, it might slow down how quickly your page loads while it tries to grab the data from the Javascript site. The tradeoff here is that this solution is easiest to use, especially for non-techies.

The second method is the safer of the two and is more efficient, but the tradeoff will be the need for staff time and resources. It will require someone install the software (Magpie, for example, is one of the most popular), configure it, and embed the code in your HTML pages.

However, no matter which method you use, displaying external feeds on your site can make it more dynamic and interesting. Or, you can just display your own content from one section of your site on another section, taking advantage of the opportunity to reuse information you're already creating or posting.[5]

When I talk to my staff I describe RSS as simply another method for publishing information about the library. I think the primary benefit for patrons is that RSS allows them to receive library information in the way that best suits them. RSS is Ranganathan's Fourth Law in action: "Save the time of the reader." Perhaps the top benefit for the library is that patrons are receiving information about library services that they might otherwise be too busy to get on their own if they must to go the library website to get it.

Glenn Peterson, Hennepin County Library, Hennepin County, Minnesota

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Librarian Steven Bell discovered the benefits of feeding library Weblog content into courseware via RSS:

> One benefit for libraries blogging to courseware is seizing a leadership role for the library in creating awareness about and education in the rapidly evolving technologies of blogging, news aggregation, social networking, and search personalization. In my own academic community, blogging to courseware has produced the added benefit of sparking faculty interest in RSS technology. Several faculty members expressed an interest in understanding how blogs, RSS, and news aggregators can help students learn about their disciplines. For example, a science professor wanted to feed postings from a blog about the everyday, practical applications of scientific principles into his chemistry course, finding it an excellent way to help students make connections between course content and the world beyond the classroom.[6]

Jay Bhatt from Drexel University is taking it further; he is aggregating topical RSS feeds from authentic sources (such as Tables of Contents from Ingenta's serials) into specific courses. This becomes a very powerful way to embed library resources where the students already are, pulling together relevant information from the library's catalog, databases, and external, librarian-endorsed sites. To top it off, Bhatt is also using RSS aggregators to teach students how to evaluate and filter their information flow. In other words, he's teaching information literacy through the use of Bloglines! And it's working. According to Bhatt, "My consultations with students most of the times result in students creating Bloglines account and adding feeds."

Part 2: Implementing RSS

Use these steps to get started toward offering and using RSS at your library.

- **Your library staff will need to decide if the library is going to display another entity's/institution's RSS feed(s) or generate RSS feeds internally**. It may be easier to start with simply displaying feeds on your library's site. Adding a blog automatically gives your library a feed.
- **Look for places RSS can save you lots of valuable time**. Does an individual on your library's staff type up new arrivals to the library collection weekly, and then create Web pages or e-mail that content? Find ways to automate this with RSS (a blog announcing new material in the library collection is the easiest) and save hours of staff time yearly.
- **Determine if your library would like to build an RSS-fed portal or offer a list of starter feeds for your users.** There are many ways libraries can facilitate RSS for our users, many of which draw upon our traditional roles and skills as a profession. For example, librarians have always engaged in collection development, and we can fill a need for our patrons in this area with RSS. We are trained to find and evaluate authoritative and useful information for our users, so what if we find authoritative and useful RSS feeds for them? For those users that want to learn about aggregators or who like to do things for themselves, we can help them find relevant feeds and subscribe to them. Science librarians can recommend science feeds for their local communities (as Emily Alling has done at the University of Massachusetts, http://people.umass.edu/ealling/feeds.html), while public librarians can localize content and recommend feeds of interest to the local community. School and academic librarians can recommend lists of feeds for class projects or entire departments. And special li-

brarians can customize recommendations for their industries or organizations. It is really just an extension of the traditional role of trusted guide that we have always played for our patrons.

Thanks to many of the new tools we're discussing, librarians also have the chance to easily create portals of information so that users don't have the time or desire to learn about all of this. Thanks to syndication and sites such as SuprGlu (www.suprglu.com), libraries can build a one-stop site of aggregated feeds for free and simply point users to it.

SuprGlu: Piecing Your Web Together
www.suprglu.com

Community Portal: La Grange Park Public Library
http://shiftedlibrarian.suprglu.com

For example, Jenny Levine built an example community portal for the La Grange Park Public Library in Illinois (http://shiftedlibrarian.suprglu.com); it displays, on one Web page, headlines from the library's blog, pictures from the library's Flickr account, bookmarks from the library's del.icio.us account, upcoming events from the library's calendar, localized news from Topix.net (http://topix .net), and headlines from the local newspaper. Because it is all built on RSS feeds, the site runs itself automatically, always updating whenever new content is added to any of the sources. It cost nothing to set this up, other than an hour of time to create the SuprGlu account, find the RSS feeds, enter them into SuprGlu, and choose a template. Now the Library can link to this site as a community portal for local information without ever forcing users to learn about RSS, XML, or aggregators.

- **Train staff and users!** The most important thing you can do for your staff—for *all* staff members—is to show them how to aggregate RSS feeds. That training opens up a valuable, timesaving tool for them. The same goes for library users. Turn them onto the ease of RSS, tout your own feeds in classes, and continue to promote your feeds every chance you get.

David King on RSS

What are the benefits of RSS for your library? According to David King (blogger and acting IT director at the Kansas City Public Library):

> It allows us to get new stuff out to subscribers. Patrons wouldn't necessarily continuously revisit a page on our Web site (say, a "new mystery

novel" page)—they're much too busy doing other things. But they will subscribe to an RSS feed for our mystery page. That allows us to push out our new materials to them. We can push out not only new books/materials, but also any related events, too.

It's another way to attract patrons to our library and introduce them to our services. Once subscribed via RSS, we in essence have a "hook" in them—and can send them whatever we want to. Honestly, I'd also have to say our RSS feeds have brought our library and our website some national attention, too—since we were an early adopter of RSS feeds.[7]

The average American Internet user is not sure what podcasting is, what an RSS feed does, or what the term "phishing" means . . .

Pew Internet & American Life Project, Public Awareness of Internet Terms, www.pewinternet.org/PPF/r/161/report _display.asp

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What Have You Learned?

A good example of a library use of RSS is the Kansas City Public Library's "Guides" (www.kclibrary.org/guides). King notes that RSS is:

- RSS is a great way to push out a variety of content to our patrons
- Patrons will find our feeds and subscribe to them, even if we don't advertise them
- For them to be heavily used, we need to advertise them—inside and outside of the library (we have not done any of this, unfortunately).
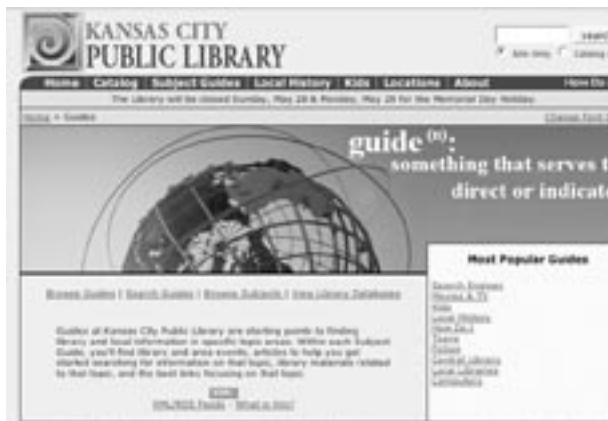

Figure 13:
The Kansas City Public Library offers RSS feeds from many of the library's subject guides. (www.kclibrary.org/guides)

- Staff members need to be educated about RSS feeds—what they are and what they do. If they don't understand the functionality and purpose, they won't tell patrons about them.
- Administration needs to understand the purpose and functionality, too—if they do, then they'll start a top-down push for staff to understand them and to push them out to patrons. If they don't understand them, the feeds will go stagnant (unless a staff member takes ownership of it).[8]

Librarians' Internet Index, "What's RSS?"
http://lii.org/pub/htdocs/understandingrss.htm

Kansas City Public Library, Computer Guide, "Subscribe to Our Subject Guides"
www.kclibrary.org/guides/computers/index.cfm?article =read&articleID=109

Part 3: Best Practices for RSS in Libraries

Talk to your vendors and tell them you want RSS incorporated into your library's software, so your staff members don't have to produce it themselves! Most libraries don't have enough staff or resources to devote to creating feeds out of our existing resources. For the sake of efficiency and even security, we need our vendors to step up and offer RSS feeds "natively" out of the resources for which we are already paying. It is imperative that we get content from our catalogs, databases, calendars, and other resources out into the online world at large—libraries can (and should) push the content housed on Web sites (and in content-management systems), to where the library users already are on the World Wide Web.

There are several different versions of RSS, but it is important to make sure your library utilizes use RSS 2.0 or Atom if you are planning to syndicate podcasts. Only these two versions of syndicated feeds offer the ability to disseminate audio and video files via subscription. The others will syndicate text (such as blog posts or headlines) but not multimedia files.

Also, be sure your library staff develops a policy/ procedure to explain any RSS/XML buttons on the library's Web site. The traditional orange button with white text that just says *XML* is a complete mystery to many users. In terms of usability, it means nothing and provides no instruction or direction. The best course of action is to include a link (with a title something like, "What Is This?" or "Learn More about RSS") to a page that explains what RSS is and how a user can subscribe to the feed in a reader (such as Bloglines). Two good examples of this type of explanation can be found at the "What's RSS?"

link at Librarians' Internet Index (lii.org) and the Kansas City Public Library's subject guides (www.kclibrary.org/guides/computers).

Subscribe to your library's RSS feeds in a personally created (or one created, for example, for the entire library staff) aggregator, so you can see what your readers see. Sometimes the formatting in a post is a little off, and the text doesn't appear quite right in an aggregator. Checking your library's feeds will allow you and your staff members to discover any problems your users are seeing and immediately correct them. Plus, it helps with typos, grammatical errors, etc.

Be sure to market your feeds to others in your local community! Public libraries can talk to local government entities, the park district, schools, sports clubs, and other bodies about displaying library content on *their* Web sites. School and academic libraries can market feeds to specific departments, class projects, and throughout the institutional portal/Web site. Special libraries can offer a wealth of feeds targeted at their various audiences, such as medical news for hospital libraries, industry news for corporate libraries, legal news for law libraries. The possibilities are endless, and it gives you the chance to recommend appropriate feeds, teach information literacy, or even just show some leadership in the area of technology!

Resources on RSS

Darlene Fichter, "Using RSS to Create New Services," *Online* 28, no. 4 (2004): 52–5.

"Feed for Thought," Burning Questions: The Official Feedburner Blog, http://blogs.feedburner.com/feedburner/archives/001518.html (accessed June 5, 2006).

Kevin Hale, "The Importance of RSS," Particle Tree (June 13, 2005), http://particletree.com/features/the-importance-of-rss/ (accessed June 5, 2006).

Figure 14:
Librarian's Internet Index provides a detailed explanation of RSS (http://lii.org/pub/htdocs/understandingrss.htm)

Preetam Rai, "Using Bloglines (Or How to Keep Up Dozens of Blogs," Betterdays Blog (April 25, 2005), http://preetamrai.com/weblog/archives/2005/04/25/bloglines-how-to-keep-track-of-hundreds-of-blogs-and-some-news-and-some-podcasts-and-some-flickrs-photos-etc-etc (accessed June 5, 2006).

Danny Sullivan, "Making an RSS Feed," SearchEngine Watch (April 3, 2003), http://searchenginewatch.com/sereport/article.php/2175271 (accessed June 5, 2006).

Roland Tanglao, "Remixing RSS: Past, Present, and Future," Idea Alliance (2005), www.idealliance.org/proceedings/xml05/ship/152/rssRemixing.html (accessed June 5, 2006).

Roy Tennant, "Feed Your Head: Keeping Up by Using RSS," *Library Journal* 128, no. 9 (2003): 30, www.libraryjournal.com/article/CA296443.html (accessed June 5, 2006).

Notes

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2. Dave Winer, "Automated Web Surfing," Really Simple Syndication: Scripting News Inc. (September 11, 2005), http://www.reallysimplesyndication.com/2005/09/11 (accessed June 5, 2006).
3. Karen G. Schneider, "Lists Versus Blogs: Wait and See," Free Range Librarian Blog (January 29, 2005), http://freerangelibrarian.com/2005/01/lists_versus_blogs_wait_and_se.php (accessed June 5, 2006).
4. John Blyberg, "Taking Advantage of Web and Library 2.0," Blyberg.net (February 9, 2006), www.blyberg.net/2006/02/09/taking-advantage-of-web-and-library-20 (accessed June 5, 2006).
5. Jenny Levine, "Conversation, Community, Connection, and Collaboration: Practical New Technologies for User-Centered Services Road Show," (2006). (More information at: www.techsource.ala.org/blog/2006/02/on-the-road-with-jenny-and-michael.html, accessed June 5, 2006.)
6. Steven Bell, "Where the Readers Are," *Library Journal* (October 15, 2005), http://www.libraryjournal.com/article/CA6269278.html (accessed June 5, 2006).
7. Information provided from e-mail correspondence with David Lee King, June 4, 2006.
8. Ibid.