

Staying on Top:
The endless task of keeping up with new information
- as painlessly as possible

Dorothy Barr

Abstract:

Too much information! But the need to keep up with the constant bombardment of new information has never been more urgent. We need efficient ways to get current information in a timely manner, sort through it, pick out the best, and then do something with it so we can keep it organized and accessible. What's more, we need to help our patrons do the same – and to make it as easy and painless as possible for them. Every time we turn around, there are new tools to help us do all these tasks – and just keeping track of those tools can feel like a full time job in itself. Moreover, as much as we want to keep up, it can be hard to actually plunge in and try something new. Nevertheless, as librarians we need to be not only familiar with new technologies, but comfortable using them, so that we can demonstrate them effectively to our users (Bandemer & Tannery, 1998).

We will look at some of the free, easily accessible alerting systems available in the biological and life sciences, and discuss ways to help not only ourselves but our patrons make use of those that are most relevant and practical for them. These include email alerts and tables of contents (TOCs) from publishers; features such as PubMed's My NCBI that saves searches, emails results, and now lets you save individual references; blogs used to share pertinent information with various audiences; RSS and other feeds that gather relevant items without cluttering your email accounts; social bookmarking; and more. None of these are new; they've been around long enough to have been tested and found useful and reliable.

Introduction:

Of course, the need to keep up with current information is nothing new. Librarians have been doing it – and helping patrons do it - for many years (Cohen, 2004b; Kemp, 1979). But with the advent of the Internet, it's a whole new game - not only the methods but also the expectations, not to mention the sheer quantity of information available. It's all too easy to be intimidated by the constantly growing resources available. The title of an article dating back to 2002 says it all: "Keep me posted ... but not too much" (de Stricker, 2002).

The tools we're going to cover are all free, simple to use and readily available. They do not involve using any equipment except your computer. Of course there are lots of options available for mobiles, PDAs and other devices. But you do NOT have to own anything fancy OR be a computer geek! And since many of our patrons have not even heard of some of these tools, let alone tried them, it is important for us to take the plunge and lead the way.

Alerts and TOCs

Throughout the 1990s, as the Internet evolved and more and more people used it, librarians kept finding new methods to keep current themselves and also ways to share information with their patrons (Bandemer & Tannery, 1998; Cox & Hanson, 1992; Galpern & Albert, 1997; McKimmie, 1994; McQuistan, 2000a; McQuistan, 2000b; McQuistan, 2001; Mountifield, 1995). The use of current awareness services extended beyond Library Land to other fields such as business (Harris & Marshall, 1996; Kiley, 1997) and medicine (Beard, 2003; Brown, 2000; Ebenezer, 2004; Kiley, 1997; Samskog, Wetterhall, Jacobsson, & Markides, 2000).

Originally the tools most often used were various **Tables of Contents (TOCs)** and **alerts**. Both are still useful today. The only drawback is that they generally send emails to already overloaded mailboxes (though this is changing with the advent of feeds).

Once you start looking for alerts, you find that they are ubiquitous. **Publishers** are very happy to send TOCs; examples include the *Nature* group of publications, Freewire Press, and the *New Scientist*, among many others. If you have technophobic patrons, these are a nice first step. They are free, though snippets of articles may be accompanied by annoying offers to sell you a subscription so you can read the whole article.

There are other free alerts; for example, **MedScape** from WebMD (<http://www.medscape.com/px/urlinfo>). You can register for free, choose specialty areas and get medical news and reports.

More and more **databases** offer free alerts for searches even to non-subscribers. EBSCO has a service; so do Ovid, Springer, ScienceDirect and the ISI Web of Science, among others. You can set up a search and arrange to get email notifications of new results. Some databases (e.g., ISI) also offer citation alerts.

Alerts are also available from **government agencies**. Check individual sites of interest – e.g., the U.S. Geological Survey (<http://www.usgs.gov/>). To search across government agencies, try Science.gov (<http://www.science.gov/alerts3.0.html>). It is evolving and is currently on version 3.0. While it still seems to present too many repetitive hits, it continues to improve and is worth trying since it finds materials and grey literature that you might otherwise miss.

Professional societies often offer free alerts even to non-members. Check any societies of interest to you. For example, ACS has a News Service page at <http://acswebapplications.acs.org/applications/ccs/application/index.cfm> that anyone can visit, and you can register for free to get alerts.

At this point, **Scirus**, the free science search engine (<http://www.scirus.com/srsapp/>), doesn't offer alerts, but you can click on the link to [Latest Scientific News - from New Scientist](#) for headlines with a quick listing of science news articles.

Of course Google (<http://www.google.com/alerts>), Yahoo! (<http://alerts.yahoo.com>), and other **search engines** have gotten into the alerts game. Their free versions have all the usual limitations, and no matter how carefully you craft your search, you usually end up with a lot of irrelevant results. (Naturally, they are quick to tell you that there are paid versions available that are presumably much more efficient.) However, especially if you are just looking for news, these alerts can be useful.

NCBI

NCBI (National Center for Biotechnical Information) has since 1988 been a national resource for molecular biology information. NCBI offers public databases, conducts research in computational biology, and develops software tools for analyzing genome data. Its best-known database is of course PubMed.

PubMed continues to evolve new and exciting ways to save searches and collect references. Free Web-based services such as **Biomail** (<http://www.biomail.org/>) (Carr, 2004) and **PubCrawler** (<http://pubcrawler.gen.tcd.ie/>) (which also searches GenBank) were set up to make it easy to get updates from PubMed. **HubMed** (<http://www.hubmed.org/>), which bills itself as “PubMed Rewired” and the “Swiss Army knife of PubMed interfaces,” has a few more bells and whistles and offers feeds and tagging.

However, since the PubMed Cubby has morphed into **My NCBI**, Biomail and its friends are less useful than they were. My NCBI is a service from that works with the NCBI databases – PubMed, Protein, Gene, OMIM, etc. It not only saves search strategies and allows you to see *What’s New* whenever you like, it also sends email alerts about new results. It has additional options such as *Filters* that are very useful in organizing results. And it now offers *Collections*, where you can save individual references.

It’s relatively quick and easy to show patrons how to set up My NCBI accounts for themselves. You can also have multiple accounts, to help you manage accounts for other people or simply separate your own. Access it at <http://www.ncbi.nlm.nih.gov/> or just type in pubmed.gov.

Other Services

“Old” technologies can still be useful. **Listservs** are also an important source of information that should not be overlooked. Belonging to at least a couple in your particular fields of interest helps you and your patrons keep up with what is happening in specific disciplines, and information about new resources is often included. A couple of good examples for librarians are BSDNET-L (of course); the Natural History Caucus; IAMSLIC; and many more.

Services like PubSub (<http://www.pubsub.com/>) search a variety of information sources (mainly blogs, but also Internet newsgroups and other data streams). You enter a

search term (a *subscription*) and you can see results and set up feeds. You can also look at other people's subscriptions. But there are drawbacks; while you get some stuff you would never find otherwise, you also get a lot of junk.

To monitor the library and information technology literature, there are many excellent blogs and other resources, such as:

- Current Cites (<http://lists.webjunction.org/currentcites/>) monitors the LIS literature and sends monthly emails annotating the best (also available as an RSS feed).
- The Resource Shelf (<http://www.resourceshelf.com/>) is a must.
- Steven J. Bell's Keeping Up site has links to many library and IT resources at <http://staff.philsu.edu/bells/keepup/>. He makes the excellent point that "academic librarians and technology professionals must go beyond the constraints of their own literature to really keep up and maintain their myriad skills and diversified knowledge base." And I would add, to better serve our patrons, especially in the sciences.
- SLA's own Stephen Abram's Stephen's Lighthouse (<http://stephenslighthouse.sirsi.com/>).
- And many more. Library blogs tend to quote each other so if you choose a few wisely you'll probably end up eventually reading most of the most relevant items.

From their beginnings as online diaries that didn't get much respect, **blogs** have developed as the technology has been adapted for a variety of serious uses (Bell, 2005; Schultz, 2005; Secko, 2005). This rapid proliferation has meant that the amount of information readily available in a timely fashion has exploded. This is a good thing, but it also means that the number of sites to monitor has also exploded. Even if you only follow library blogs, and only the best of those, you could easily spend half your time just reading them.

The Next Step: Feeds

To the rescue inevitably has come a new technology, the **feed**. Although there are several different kinds, the most common is *RSS* (there are various descriptions of what it stands for, but Really Simple Syndication is probably the most used) (Bjorking & Walter, 2004; Broun, 2004; Byrne, 2005; Calishain, 2005; Cohen, 2002a; Cohen, 2002b; Fichter, 2004; H. Green, 2004; Hammond, Hannay, & Lund, 2004; Jacobs, 2004; Miller, 2004; Tennant, 2003; Wadham, 2005; Wusteman, 2004). In fact "RSS" has come to mean "feed" in much the same way that "Kleenex" is often used for "tissue."

From the standpoint of the user, a feed simply offers a means of collecting new entries as they appear on websites ranging from blogs to news sites to databases such as PubMed. The relevant Internet site has to be set up with the appropriate software, called a generator, so that every time something new is added to the site, the generator writes a piece of computer code – this is the actual feed.

The user then has to have software that can accept and read the feed. This software is called an **aggregator** or a **news reader** or **feed reader** – it collects the feeds to which the user has subscribed and presents them for her/his perusal. The advantage is that instead of new items arriving in your email in bits and pieces, the aggregator gathers all the new pieces of information together in one place. You can then go and check it at your convenience.

There are many different aggregators available (see handout for just a few). Some you download to your computer; others are Web-based. I'm going to talk about only one, and that is Web-based because I move around a lot and it's much easier for me to be able to access my feeds anywhere there is Internet access. This is not an advertisement for this particular product; you should shop around, ask other people, and decide for yourself. But aggregators all work pretty much the same way.

Although originally designed to work with blogs, feeds aren't limited to them. More and more news sites like the BBC and CNN have added feeds so that you can get news items from the sections of interest pretty much as they happen. CNN allows you to add a feed to My Yahoo! and also offers podcasting feeds. Look for the  or  or  buttons and just follow directions. The BBC's directions are especially clear and simple to follow.

Bloglines (<http://www.bloglines.com>) is a web-based aggregator that makes it very easy to set up an account. Then you simply add feeds from the sites of your choice. You can click on the button on the site, copy the resulting URL, and past it into the appropriate box in your aggregator. Or you can work in the other direction, entering the URL of the desired site into a search box in your aggregator.

Then presto! Instead of having to keep checking multiple sites, all the new items from your chosen sites will arrive in your Bloglines account. I now collect a wide variety of feeds, from my favorite football team's page on the BBC, to biology and science journals and sites, to the SLA Baltimore Conference blog, to several library blogs. I even monitor the Careers in Medicine blog I set up for the medical students so that I know the feed works. Depending on the feed, you can get the entire article, or a summary, or just the headline with a link to the original so that you can choose whether to go to it.

Recently I've added a couple of searches from PubMed. This is a relatively new option and for me has pretty much superseded using My NCBI for alerts. To use it, once you have a search that you like, from the *Send To* box select *RSS Feed* and just follow the directions. (I do still use My NCBI because for some patrons, that's as high tech as they are ready to get and it's good to have something to show them.)

Feeds also work the other way – you can set them up for your patrons to get news from your library blog, for instance ((Boss, 2006).

The advantages of feeds are obvious. All your newsy stuff is collected for you in one place for you to visit at your leisure (though you can choose to get notifications every

time something new is added to a site). You can also scroll through the entries and choose to read the whole thing or not. You can email them, or send them directly to a blog. You can go back and look at older items. You can save ones you like (in Bloglines it's called *Clippings* and you can arrange your clippings in folders). And, it's easy to unsubscribe – it just takes a couple of clicks.

One caveat - it's very easy to collect too many feeds, and experts advise you to exercise caution and restraint. One excellent suggestion is to establish a sort of Holding Pen – a Provisionary folder – into which you put new feeds. Visit them once a week for a couple of weeks and decide which ones you really want to get – then ruthlessly delete the rest.

More New Stuff: Organizing Your Favorites and More

Once you've started collecting, the next challenge is what to do with the stuff you want to keep. Your aggregator will keep your stuff indefinitely and you can choose to display some or all the entries with the click of a button, and then go to the complete original entries. So aggregators work well with specific entries. However, to collect and organize Web sites, traditional methods such as Bookmarks can become very cumbersome.

Enter **Social Bookmarking!** One example is Del.icio.us (<http://del.icio.us>); another is Wink (<http://www.wink.com/>); another is CiteULike (<http://www.citeulike.org/>), which is specifically designed for academic papers. When you find a Web page you want to bookmark, you just post it (you can put a shortcut in your toolbar), tag it with whatever terms you think will be most helpful to you in retrieving it, and that's it. Your chosen bookmarks are collected on the Internet, where you can access them easily and then look at your whole collection or search for items with specific tags. You can also see what other people have posted with the same tags, which may – or may not - be a useful way to find new stuff.

As mentioned above, My NCBI Collections now allows you to save and organize references from the NCBI databases indefinitely. You can then click directly to the full entry. This is especially nice if you don't have reference management software like RefWorks (which incidentally now allows you to click on links to view the entry in PubMed, and even retrieve Related Articles directly).

Tips to Introduce New Stuff to Patrons

- Know your audience – with some people it's best to start slowly.
- Use straightforward language – avoid jargon. If you use a technical term, explain what it will do for them – why they should want it.
- Plant the seed – advertise classes, mention new technologies, demonstrate them quickly whenever the opportunity arises.
- Make connections for people. For example, if you're working with someone in PubMed, show them some of My NCBI's cool features. It's much more effective to show something in context than to just talk about it.

- Handouts may seem old-fashioned, but they really help. Also keep your card handy – make it easy for people to follow up and contact you.

Conclusion:

Although not everyone is going to eagerly embrace new technologies, it's important for us as librarians to be in the forefront. We need to know what we're talking about if our patrons come to us and say, "Tell me about feeds – should I get an aggregator?" and of course, to fully understand any technology you really have to use it. As Steven Cohen puts it, "be a Hero @ your library" (Cohen, 2004a).

In a March 12, 2006 entry in the Darwinian Web (<http://darwinianweb.com/>), a blog on the evolution of the Internet (nothing to do with libraries), Adam Green remarks that "[a]nother unexpected source of Web innovation is librarians ...next to accountants, librarians are the last group of people I would expect to jump into new technologies." He goes on to comment, with a certain bemusement, that "these aren't software geeks who are pushing the envelope. I now realize that I can find cool software ideas by searching for blogs and websites with the word library in the URL" (A. Green, 2006). Librarians are cutting edge!

More and more colleges and universities are putting information about new technologies on their websites. These include the University of Toronto (<http://main.library.utoronto.ca/myalerts/>); the Health Sciences Center Library at SUNY Stony Brook (<http://www.hsclib.sunysb.edu/researchtools/alertingservices>); the University of Wisconsin - Milwaukee (<http://www.uwm.edu/Libraries/guides/reveal58.htm>); the University Library at California State University, Long Beach (http://www.csulb.edu/library/subj/current_awareness.html); even the Chinese University of Hong Kong (<http://www.lib.cuhk.edu.hk/information/publisher.htm>). Many more offer classes and handouts. This is a trend sure to continue, with more and more libraries assuming leadership roles in presenting new technologies to their patrons.

There are so many exciting new tools that are not only free, but surprisingly easy to use. With a little initial effort you can increase your own ability to keep current, AND help your patrons do so also.

References

- Bandemer, J., & Tannery, N. H. (1998). A comparison of four current awareness services. *Medical Reference Services Quarterly*, 17(2), 29-36.
- Beard, R. (2003). Web alert: Current awareness updates. *Quality in Primary Care*, 11(1), 69-72.
- Bell, S. (2005). Where the readers are. *Library Journal*, 130, 8-8.

- Bjorking, L., & Walter, R. (2004). Aggregating the aggregators: An agnostic approach. *Information Services & use*, 24(3), 121-129.
- Boss, R. W. (2006). *Libraries and RSS*. Retrieved April 9, 2006 from <http://www.ala.org/ala/pla/plapubs/technotes/LibrariesandRSS.pdf>.
- Broun, K. (2004). New dog, old trick: Alerts for RSS feeds. *Net Connect*, 129, 18-20.
- Brown, S. M. (2000). Be alert: Free sequence alerting services. *BioTechniques*, 29(6), 1210-1212.
- Byrne, G. (2005). RSS and libraries - fad or the future? *Feliciter*, 51(2), 62-63.
- Calishain, T. (2005). RSS shopping. *Searcher*, 13(10), 8-12.
- Carr, A. (2004). Test the new version of BioMail! A current awareness alternative for PubMed. *Latitudes: Newsletter of the Pacific Southwest Region (NN/LM)*, 13(2), 17-18.
- Cohen, S. M. (2004a). Eight steps for keeping current. *Knowledge Quest*, 33(1), 40-41.
- Cohen, S. M. (2004b). *Keeping current: Advanced Internet strategies to meet librarian and patron needs*. Chicago, IL: American Library Association.
- Cohen, S. M. (2002a). *RSS for non-techie librarians*. Retrieved February 14, 2006 from <http://www.llrx.com/features/rssforlibrarians.htm>.
- Cohen, S. M. (2002b). Using RSS: An explanation and guide. *Information Outlook*, 6(12), 6-10.
- Cox, J., & Hanson, T. (1992). Setting up an electronic current awareness service. *Online*, 16(4), 36-43.
- de Stricker, U. (2002). "Keep me posted... but not too much": Challenges and opportunities for STM current-awareness providers. *Searcher: The Magazine for Database Professionals*, 10(1), 52-59.
- Ebenezer, C. (2004). Guide to current awareness services. *RCM Midwives Journal*, 7(9), 399.
- Fichter, D. (2004). Using RSS to create new services. *Online*, 28(4), 52-55.
- Galpern, N. F., & Albert, K. M. (1997). UnCover on the web: Search hints and applications in library environments. *Medical Reference Services Quarterly*, 16(3), 1-18.
- Green, A. (2006). *Darwinian web: Librarians are now software innovators?* Retrieved March 15, 2006 from <http://darwinianweb.com/archive/2006/302.html>.

- Green, H. (2004). Your online paperboy: How really simple syndication delivers just the web sites you want. *Business Week*, (3913), 104.
- Hammond, T., Hannay, T., & Lund, B. (2004). The role of RSS in science publishing. [Electronic version]. *D-Lib Magazine*, 10(12).
- Harris, G., & Marshall, J. G. (1996). Building a model business case: Current awareness service in a special library. *Special Libraries*, 87(3), 181-194.
- Jacobs, J. R. (2004). RSS: It's only XML but I like it. *DttP: Documents to the People*, 32(2), 10-11.
- Kemp, D. A. (1979). *Current awareness services*. London: Clive Bingley.
- Kiley, R. (1997). Current awareness services on the Internet. *Journal of the Royal Society of Medicine*, 90(10), 540-542.
- McKimmie, T. (1994). *Evaluation of a current awareness service in an academic library*. No. ED374820. New Mexico State University.
- McQuistan, S. (2001). Techniques for current awareness, part 3: Using library and information services and bibliographic databases. *Journal of Audiovisual Media in Medicine*, 24(1), 36-37.
- McQuistan, S. (2000a). Fundamentals. *Journal of Audiovisual Media in Medicine*, 23(4), 183-184.
- McQuistan, S. (2000b). Techniques for current awareness. *Journal of Audiovisual Media in Medicine*, 23(3), 124.
- Miller, R. (2004). Can RSS relieve information overload? *EContent*, 27(3), 20-24.
- Mountfield, H. M. (1995). Electronic current awareness service: A survival tool for the information age? *Electronic Library*, 13(4), 317-24.
- Samskog, J., Wetterhall, M., Jacobsson, S., & Markides, K. (2000). Current awareness. *Journal of Mass Spectrometry*, 35(7), 926-937.
- Schultz, B. (2005). Blogs: Getting started. *Business Communication Quarterly*, 68(1), 67-73.
- Secko, D. (2005). The power of the blog. *The Scientist*, 19(15), 37-42.
- Tennant, R. (2003). Feed your head: Keeping up by using RSS. *Library Journal*, 128(9), 30.
- Wadham, R. (2005). Rich site summary (RSS). *Library Mosaics*, 16(1), 25.
- Wusteman, J. (2004). RSS: The latest feed. *Library Hi Tech*, 22(4), 404-413.