

Using free web tools to enhance RSS feeds for NHS Evidence – gastroenterology and liver diseases

Royal Free Hampstead  Matthew Hall, Information Specialist, NHS Evidence – gastroenterology and liver diseases

Background

NHS Evidence – gastroenterology and liver diseases uses RSS feeds as a service to update users about every item that we add to the collection. We have a total of sixteen feeds:

- A main feed for all records we add to the collection.
- Thirteen different subject feeds, for different parts of our subject taxonomy. Each of these contains all records added to that part of the taxonomy.
- Feeds for news items and events.

The news and events feed are automatically generated by the Specialist Collection's record management system (RMS) when we add new items. Items to the other feeds need to be entered manually.

The problem

The RMS has an RSS tool that, by default, staff on the Specialist Collections use to manually add items to their feeds. However, we found that it has a number of limitations:

- There is no way to copy items between feeds. As a result, items had to be manually added to every feed that they belonged in. As we have fourteen different feeds whose content overlaps to a large degree, this was very time-consuming.
- Our RSS entries are normally links to existing records in the Specialist Collection, which we have already entered text for. In order to put them on the RSS feed, we needed to enter some text again. This, again, was quite time-consuming. The RMS also places an unnecessary limit on the possible length of the text of an RSS item.
- There is no way to track numbers of subscribers to each feed. We wanted to know how many people are using our feeds.
- The RMS can display feeds as part of Specialist Collection web pages, but it does not do so in a very attractive way.

In addition, we had been experimenting with using Twitter to provide updates as well. Since the same items were being published through RSS and Twitter, it would have been convenient to be able to send items from one to the other automatically.

I decided to see what the free RSS tools available on the Internet could do to enhance our RSS feeds.

Filtering feeds with Yahoo! Pipes

Yahoo! Pipes (<http://pipes.yahoo.com>) is a service that allows you to plug in an existing feed or feeds and perform operations on them, coming out with a new URL for a modified feed at the end. One operation it can perform is filtration; you can ensure that items in the input feed only make it to the output feed if they meet certain conditions.

This provides a solution to the problem of having to enter multiple identical items separately into different subject feeds. Instead, items can be entered only once into the main updates feed. Pipes is then used to create thirteen new feeds, by filtering the content of the main feed by subject matter. It can do this because it is able to read information in the URL that is given in a feed item. In our case, these URLs lead to records in the Specialist Collection, and each record includes information about its taxonomy headings. The existence of the correct taxonomy headings can therefore be used as criteria to filter the feed.

Rewriting feeds with Yahoo! Pipes

Another thing Pipes can do is actually change the text of feeds. This solves the problem of having to manually duplicate text we had already entered in Specialist Collection records when it came to writing RSS items. In our solution, when Pipes sees an item, it once again opens the link to the Specialist Collection record. It then grabs the whole of the text of that record, and replaces the text of the RSS item with it. We therefore do not need to enter any item text ourselves, because anything we do enter will be automatically rewritten. This also gets around the artificial limit on item length imposed by the RMS.

Statistical information from Feedburner

Feedburner (<http://www.feedburner.com>) is one of several services (others include Feedcat and Feedblitz) that allow you to see statistical information about usage of your feeds. and giving you a new one which has exactly the same items, but whose subscribers and subscriber activity are tracked by Feedburner. You can log into your Feedburner account in order to see the numbers.



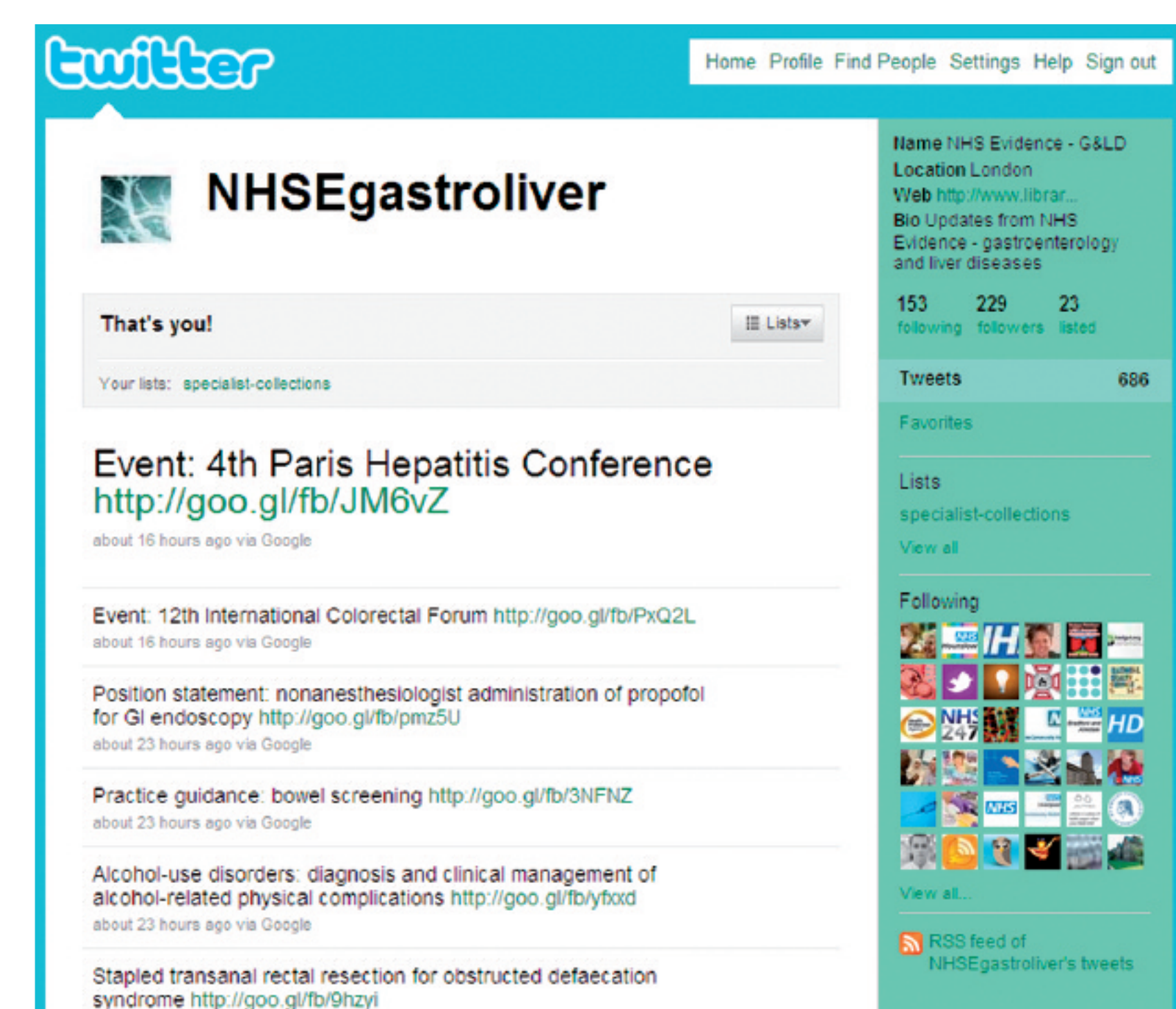
The screenshot shows the NHS Evidence RSS feed interface. At the top, it says 'NHS Evidence - gastroenterology and liver diseases - Latest Updates' and 'syndicated content powered by FeedBurner'. There is a 'Subscribe with Google' button and a link to 'Learn more about syndication and FeedBurner...'. Below this, it lists 'Current Feed Content' with two items. The first item is a 'Position statement: nonanesthesiologist administration of propofol for GI endoscopy' posted on Wed, 30 Jun 2010 09:54:33 -0700. The second item is 'Practice guidance: bowel screening' posted on Wed, 30 Jun 2010 09:41:22 -0700. Each item includes a brief description and 'Aims'.

More attractive RSS feed display

Both Pipes and Feedburner, as well as hundreds of other free services on the Web, can give you HTML code to embed your feeds on a web page.

RSS to Twitter

Feedburner can also send items from its feeds to a Twitter account. There are also a number of other services that can do this, such as Twitterfeed and RSS2Twitter. Items on the Twitter account consist of the title of the item, and a shortened link to the Specialist Collection record it corresponds to.



The screenshot shows a Twitter profile for 'NHSEgastroliver'. The profile includes a bio, location (London), and a list of tweets. Recent tweets include: 'Event: 4th Paris Hepatitis Conference http://goo.gl/fb/JM6vZ', 'Event: 12th International Colorectal Forum http://goo.gl/fb/PkQ2L', 'Position statement: nonanesthesiologist administration of propofol for GI endoscopy http://goo.gl/fb/pmZ5U', 'Practice guidance: bowel screening http://goo.gl/fb/3NFNZ', 'Alcohol-use disorders: diagnosis and clinical management of alcohol-related physical complications http://goo.gl/fb/ffoxd', and 'Stapled transanal rectal resection for obstructed defaecation syndrome http://goo.gl/fb/9hzyt'.

Putting it all together

A graphical flowchart of our current RSS system can be found below. Instead of having to update fourteen different feeds in the RMS, we now only have to enter items into one. Pipes takes this feed and first replaces its text with the text of the Specialist Collection item, and then produces thirteen new subject feeds (only three of which are displayed in the flowchart). We now have fourteen feeds with Pipes URLs. Each of these URLs is put into Feedburner, to get a new set of URLs whose usage we are able to get figures about. The main feed is also sent to Twitter to automatically generate our updates there. When we need to display feeds on a page, we get HTML code from Pipes that can be copied onto our own pages for a more attractive result than you get by using the RMS version.

One catch was that for this to work, we had to change our feed URLs. We announced that we would be doing this several months before we stopped updating the old subject feeds, in order to give users as much time as possible to make the change.

