



Arachnids in (Cyber) Space?

I don't know about you, but I am fascinated by spiders. When one comes to live at my house, I see the artistry of these small creatures. The intricacy of their webs is amazing. Not only that, but silk spiders provide us with the natural fibers for producing some of the most beautiful fabric in the world. Of all the places that you would expect to find a spider, the Internet is not likely to be on your list, but did you know that spiders are crawling through cyber space all the time? Well, sort of...

When you want to find information about a specific topic on the Internet, you utilize a search engine to locate a list of possible Web sites for you to visit. An example of a search engine would be GoodSearch, which provides a small donation to the charity of your choice when you utilize their search engine services (LWML is registered with GoodSearch, so if you would like to donate through GoodSearch, see <http://www.goodsearch.com/>, and select 'LWML' as your chosen charity).

How does a search engine sort through the millions of Web pages to identify those that pertain to your topic? There are different means by which search engines work, but all of them:

1. Search the Internet and select portions of it based on important words
2. Keep an index of the words they find and where they find them
3. Allow users to look for words or combinations of words found in the index

The next question that begs an answer is: How do search engines search the Internet? With spiders! Spiders are special software robots that 'crawl' through cyber space compiling words for search engine indexes. Spiders begin with a popular

site, indexing the words found in this site. Then, they follow all of the links in the original site and index them, as well. By this means, spiders travel quickly through the most widely-used portions of the Internet.

While crawling, the spiders will take note of what words are used and where they are found. Words that appear in the title, subtitle, or meta tags are likely to be noticed. **Meta tags** are information inserted into the "head" area of your web pages, and they are invisible on the 'live' site, so that your viewers do not see them. They allow a site owner to specify key words and concepts under which the page will be indexed by the search engine. This means that the Web site owner has a portion of control over how his/her site is described by a search engine. Here is an example of a meta tag HTML code (taken from www.searchenginewatch.com):

```
<HEAD>
<TITLE>Stamp Collecting World</TITLE>
<META name="description" content="Everything you wanted to know
about stamps, from prices to history.">
<META name="keywords" content="stamps, stamp collecting,
stamp history, prices, stamps for sale">
</HEAD>
```

There are two types of meta tags, description tags and keyword tags. A **description tag** allows you to influence how a search engine will describe your Web site, and it is noted in the HTML example above in the line that starts with "META name='description'." The description tag follows the "content =" HTML code. A **keyword tag** is useful only for search engines that recognize them (not all of them pay attention to this tag). If recognized, keyword tags help define the important terms on a Web page. Keyword tags are

noted in the HTML example above in the line that begins with "META name='keywords'." The keywords follow the "content=" portion of HTML.

Once the information on each site is obtained, the search engine must make the information accessible to users through their index. This index is a very large database that the search engine provider supports. You cannot see this index; it is the source of information from which the search engine derives a listing of Web sites to match your search. Spiders will consider the number of times a word appears on a page, and may even assign a weight of importance to the word, depending on the location it has in the text. Numerical values are assigned to each word in the index by the search engine; this compacts the enormous amounts of data into a manageable size for quick recall when you enter a topic into the search

engine. Each search engine has a different way of assigning weights and numerical values, and this information is kept in the hidden index.

So, you see, spiders provide another valuable service to us humans! For webmasters, they are the means by which a site can be located in an Internet search; this is an invaluable resource for reaching new site visitors.

*Information for this article obtained from
[http://computer.howstuffworks.com/
search-engine.htm](http://computer.howstuffworks.com/search-engine.htm)*

Search Engine Optimization

In decision-making theory, there are pitfalls to avoid when considering options. One of these is called 'proximity,' which means that we tend to choose the option that is closest to us. In Web terms, this means that when a search engine has provided potential viewers with a list of Web sites that pertain to their search topic, the viewer is likely to choose the site that appears at the top of the list. How do you get to the top of that list? By utilizing search engine optimization tools. These tools include: Web site content, placement of keywords, and link analysis/link exchanges.

The most important component of search engine optimization is **excellent content** in your Web site. Your content is the basis for building a strong presence in search engine indexes. Search engine optimization tools also rely on how search engines work; that is, they strategize methods for attracting spiders.

Remember that spiders look for **keywords** within Web sites. Keywords are those terms that are important in your Web site. For example, the Web Site Task Force could use keywords such as mission(s), Bible, women, or Lutheran, to distinguish the main ideas of the LWML Web site. Strategic placement of keywords increases the probability that your site will attract the spider. In general, you should include keywords in your page's title, in page headers, and throughout the Web page text (particularly at the top

Additional Resources

The World Wide Web is full of information on search engine optimization. Put a search engine to work! I searched for "search engine optimization tools" in the GoodSearch engine, and found 1,589,742 possible links! Two of the resources that I found helpful include:

- www.google.com/support/webmasters: This site provides guidelines and tools for optimizing your position on Google's search engine index
- www.searchenginewatch.com: Links to search optimization tool sites, as well as a search engine optimization guide for webmasters

of the page). Overuse of keywords can have a detrimental effect on your site. Too many keywords will sound the 'spam alarm' in the search engine database. (For more information about keywords, see the Mea tags explanation in the *Arachnids in (Cyber) Space?* article in this issue of Cyber Scoop.)

Search engines also use **link analysis** to determine the legitimacy of your site; this means that the spider will see how many other Web pages are linked to your page. The importance of each link is determined by the rank of the site that the link leads to. Therefore, if your site is linked to sites that have a high ranking, your site will also rank higher. One way to gain visibility through link analysis is to develop a **link exchange** with other sites that are relevant to your site's topic. Contact the owner of the site you wish to link to, and offer to put a link to their site on your page, and ask them to put

a link to your site on their page. Again, too much of a good thing can be bad. If a search engine sees too many irrelevant links on your site, it may think that you are attempting to cheat the system.

As a webmaster, your biggest challenge will be finding the appropriate combination of search engine optimization tools and user-friendly, eye-catching content. Search engines do not index images or animated graphics, so these items may reduce spider activity on your Web site. However, images and graphics are primary tools for attracting and keeping site visitors. If you have to err on one side or the other, it is better to have a more attractive site for your viewer than a dull site that ranks high on a search engine index.

*Information for this article obtained from
[http://computer.howstuffworks.com/
search-engine-optimization.htm](http://computer.howstuffworks.com/search-engine-optimization.htm)*

Important Information Concerning Links to the LWML Web Site

Many of you have provided links from your district Web sites to the various pages on the LWML Web site. Thank you! As described above, this helps both of our sites increase search engine spider activity. The Web Site Task Force has recently updated the primary links located on the left-hand sidebar of the LWML Web site (About Us, Missions, Resources, Human Care, Conventions, News, Giving, Calendar, Photo Gallery, and Links). We have created an index page for each of these links. You will want to be sure to update links from your site to reflect the new URLs for these pages.