IT Report - February 2020

Top Issues for Information Technology

Awards Module

The good news is that this module is on it's way to becoming phenomenally successful. The original small group of societies (BSA, SSE and ASPT) who sponsored the creation of this module has begun adopting it in haste, with SSE and BSA currently managing eight awards each, and a new society is joining this group soon (SSB). The bad news is that along with the success has come an increased demand for features and support, which was a bit unexpected. SSE in particular is using the module in unexpected ways, which in a few instances has exposed bugs not noticed before, and in many cases requests for features not anticipated. Plus, there is one feature no one thought of that everyone wants, and that's the ability for a 3rd person (such as an advisor) to upload a supporting document (such as a letter of recommendation) without passing through the award applicant directly. We are calling this the "LOR" (Letter of Recommendation) feature. We have created a specification to add it, gotten a quote for the cost, and are getting everyone on board to fund it. Bottom line, the awards module is going great but will be an ongoing development, support and training issue.

Botany.org 2.0

We are behind on this, but the hard technical aspects are in place. A major piece of the new site is a new site design, and this will be based on work done for SEB last year. We will be able to use most of their design with new colors and artwork. Nearly all of the old "static html" site has been migrated to our content management system. (The only piece not yet completed is the PSB archive.)

We held a conference call of the Ad Hoc Web Redesign Committee. The bulk of the work to come involves decisions about how to arrange the massive amount of content we have on the old site. Who is our target audience(s)? What navigation strategy to use to get those audiences to the content they want? What silos do we want to divide the content into? We have a committee of members who we have asked to start thinking about these things and get suggestions from and need to continue that effort. We will schedule another call this spring for next steps.

Gotta Support the Team

We have a lot of technology that our team uses. The team needs support with that technology from time to time. Botany Conference, PlantingScience, the Awards module, CiviCRM for 4 societies, the main web sites for 3 societies, SEB conference, general server maintenance, etc. These items are taking more and more of my time, and unfortunately crowd out my ability to work on other "big" projects, such as rewriting Botany Conference or evaluating a replacement, migrating SEB to CiviCRM, redesigning Botany.org, etc. I see no obvious solution to this other than

hard-nosed prioritization of projects vs. support tasks. Adding Amelia to the team has helped quite a bit, as she is able to take on some of the "non-programming" tasks such as administrating CiviCRM and the Awards module.

Server maintenance is an issue worth elaborating on because it is an important piece of my work, but occurs behind the scenes. First, there is monitoring and addressing performance issues. Every morning, one of my first tasks is to glance at a "load monitor" graph that shows how hard each server has been working over the past day. Last Fall I noticed the SSE server under high load. There was no apparent reason. I dabbled at figuring it out for a couple of weeks before discovering that a "bitcoin mining" tool had been injected into the server, disguised as web server software (apache). I battled with it to both disable and remove it for another couple of weeks before finally giving up and migrating the SSE web sites onto an entirely new server. The whole process took almost 2 months, although not every day and not more than an hour or two each day. Another example would be that our membership management system, CiviCRM, has new versions that require a new version of php (the programming language it was written in). To accomplish this, I will need to configure our servers to run multiple versions of php concurrently, and then do the actual CiviCRM updates. These are both good examples of things that happen in the background that most people aren't even aware of, but can take significant amounts of time.

.org Registry Sale

Lastly, I want to make you aware of a larger issue going on in the tech world. Historically, a non-profit organization has been responsible for maintaining the "registry" of internet domain names for that end in ".org". That organization has been sold – pending approval – to a for-profit investment firm. This has rightly alarmed a lot of people, because it is essentially a monopoly. Essentially, it is the "wholesaler" of .org domain names. If they wanted to raise the price of an annual .org domain renewal exponentially, they could. Currently it's around \$20. We own or manage a good number of them.

There's really not a lot we can do about this except protest. Many, many people are protesting. There's good reason to believe the sale won't go through. The sale has to be approved, supposedly by February 17, so I might have more information at the board meeting. But here are some possible outcomes:

- Sale doesn't go through, business as usual
- Sale goes through, new owner acts responsibly and doesn't significantly raise prices (business as usual)
- Sale goes through, new owner significantly raises prices and we pay them.
- Sale goes through, new owner significantly raises prices and we change our domain names to something else (i.e. http://www.botanicalsocietyofamerica.com/)

You can read more about this issue here:

https://www.wired.com/story/who-control-internets-org-addresses/