

Summer 2022 IT Report, Anchorage, Alaska

The following are significant projects or tasks I have worked on since the summer of 2021. They are roughly in chronological order.

Membership Renewal

Every year, changes are required in the join/renew workflow pages in CiviCRM to reflect changes a society in question wants to make. Usually these are related to different membership options, journal subscription options, donations, etc. We do this directly for the BSA, and for the SSE and SEB which we have responsibility for. The IT department also supports CiviCRM for ASPT and AFS.

CiviCRM upgrade

Renewal season is NOT the time to upgrade CiviCRM, but that task was attempted after the initial renewal season push, on a copy of the site to be sure everything worked. This year it was rather difficult because a large update was needed, and there were issues. The first issue related to a change in the CiviCRM code that conflicted with the “Join/Renew” workflow extension that Toby Lounsbury created for us when he was employed by the BSA. Toby is still happy to work with us, and he eventually found that problem and solved it. But another problem related to, I believe, the newer version of php (the programming language used) that has prevented the actual upgrade process to complete successfully, has not been resolved. Because of time constraints I had to set this problem aside and work on other things.

Macbook Death

In September my Macbook died. This was a minor catastrophe because for a programmer, a computer is a specifically configured system to support the needed programming environment. No data was lost – it wasn’t the hard drive that failed, and I had backups anyway – but I lost roughly a month of genuine productivity due to having to build a temporary solution needed because of Apple supply chain issues, and then again for my new Macbook Pro when I was able to get it.

Econbot.org, and Ethnobotany.org

This year the SEB board decided to investigate changing their name to the Society for Ethnobotany. Naturally, this affects their web site and domain name. I participated in thinking through the options, identifying ownership and purchase options for desired domains, and managing the transfer of the domain to our control. We also want to upgrade their membership page -restricted to current members – so that it works like the BSA site. To that end, we wanted to try it with a newer version of our web site system as that would be an easier upgrade path if it worked. With the limited time I had, I was not able to make it work.... It might be the same issue as with the CiviCRM upgrade above. I had to move on to other projects on this as well.

Botany360

Our content management system includes a nice Calendar module we were able to use to create the Botany360 system fully integrated into our web site. Since it's open source, we were able to modify it's functions and it's layout to match the required specification exactly.

X-CD Evaluation.

We have arrived in the era of hybrid annual conferences, and our 20 year old "botany conference" software isn't up to the task. Over the last couple of years we have looked at different systems to handle virtual conferences, and now hybrid. We think we have found a viable option in a system called X-CD ("exceed"). Last Fall, we spent a fair amount of time evaluating whether this would work for us this year. We decided that it probably could – with some concerns – but by the time we came to that conclusion we were so close to abstract submission "launch" time that it would have been very risky to commit to X-CD for 2022. Instead we chose to stay with the "known quantity" of our own system, with data migrated to Pathable at conference time. Implementing X-CD will be a major task for 2022-23.

SEB Conference

The SEB held their conference in Jamaica starting in late May; they use our "botany conference" system for the purpose of collecting abstracts, so this system needed to be installed, configured and supported for their conference. As an aside, if the BSA moves to X-CD (or anything else) SEB will still probably need support in some way, either by continuing to use our old system, or help with learning a new system if they can afford it.

Botany Conference

One of the major tasks of every year, involving:

- Installation of the main web site system for basic information in the Fall
- Setting up proposal forms for workshops, symposia and colloquia soon after that
- Setting up Abstract submission, accounting for changes needed, in the Spring
- Putting together the program with the different Section Managers in early Summer
- Migrating the data to Pathable in the weeks leading up to the conference.

Awards project

As you know, we have a nice little module custom coded to handle our needs for taking proposals for awards, evaluating them, and scoring the results. This module is in use for BSA, SSE, SEB, ASPT, and SSB. This year, things went pretty smoothly for all societies and very little technical support was needed. However all these different sites have become "fragmented", with slightly different versions of the code on each one. Earlier this year I unified all the code into a single project. This code has not yet been deployed, pending a "quiet time" for awards when no one will mind a site being offline for short periods of time for installation and testing.

New Elections/Ballot system

Historically we have used a module in our content management system called Survey Manager for our election ballots, but last year a spammer discovered he could use it to relay spam by means of the confirmation emails sent out after a ballot was recorded (put the spam target's email address in the ballot email field, put the spam message into various "write in" fields, and the spam is then relayed to

the target via the ballot confirmation as if the target had cast a ballot). There was no easy way to block this other than requiring a member to log in to vote, because Survey Manager doesn't support CAPTCHA. So I modified a generic "forms" module to be our new election/ballot system. It has great advantages in that each election has its own page of programming code that can be customized for each election. Once I got it minimally functional, I have added features with each election we've run such as integrated candidate bios and limitations of choices enforced ("choose no more than 2"). It's working out great, although it has the one disadvantage of requiring an IT person to set up each election (it can't be done via web site user interface). Since its inception, we have used it for the SSE Election, SSE Constitutional Amendment, BSA Election, and SEB Election.

Those are the major projects I have working on this year. In addition, I spend a lot of accumulated time doing support for our staff and members just helping them solve problems, keeping things running, maintaining our servers, and a few minor projects such as:

- Maintaining a wobbly "lifediscovery.org" server (planted.botany.org/ecoed.esa.org)
- onboarding new staff members
- creating a new responsive theme for botany.org (mobile friendly)
- Maintaining our Google G Suite instances for BSA, SSE and SEB
- Observing/advising AFS with their use of an alternative payment system in CiviCRM called Stripe, which seems to get a lot of fraud attempts.