



2015 Annual Summit
Arlington, Virginia
November 4-6, 2015

Summit V Evaluation

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Executive Summary

A total of 136 members of TCNs/PENs, iDigBio, collaborating groups, and NSF participated in the 2015 Summit. Over 80 responded to the post-Summit survey; approximately 50% of respondents were affiliated with a TCN or PEN with the remaining split between iDigBio and other organizations. Approximately 40% of TCN/PEN respondents were affiliated with the most recently funded projects, with 20% affiliated with 2014-funded projects, 20% from 2011 projects, and the remaining from projects funded in either 2012 or 2013.

The vast majority of respondents across all participant groups gave the Summit high ratings. For example, nearly 90% of TCN respondents found the orientation session for new TCNs to be “somewhat helpful” or “helpful,” while 96% of respondents rated the various presentations and posters as “somewhat effective” or “effective,” on average. While a majority of participants rated the discussion groups highly as well, ratings varied widely across sessions. Most participants felt that time was appropriately distributed among presentations, discussion groups, reports and wrap-ups, posters, and opportunities for informal interaction.

Nearly everyone used the Summit as an opportunity to meet with colleagues, with about half scheduling meetings in advance. All respondents “agreed” that the Summit offered valuable networking opportunities. While networking opportunities were ample, this did not necessarily translate into mentoring with only one-half of TCN respondents believing there were sufficient opportunities for mentoring of new TCNs by experienced ones and one quarter indicating they “had no basis to judge.”

A majority of respondents reported increased understanding of iDigBio, the national digitization effort, and TCNs, and most believed it is likely they will have increased communication with TCNs and/or begin a new collaboration as a result of participating in the Summit. Of those who answered the question, 83% gave the Summit a grade in the “A” range.

Looking toward the future

When asked for ways the Summit could be improved, the most frequent response was that the Summit is fine as is and no changes are needed. That said, comments elsewhere in the survey reveal a few areas for improvement:

- Both the content and the audience for the orientation session could be tweaked to better meet the needs of those new to the digitization effort.
- Limiting the number of TCN presentations or varying the format (e.g., panel discussion, Q & A) might reduce the fatigue experienced by some participants.
- The biodiversity initiatives might also benefit from a format change.
- Satisfaction with the discussion groups might also increase with better topic selection or making the objectives of each more explicit.

Few respondents expressed interest in extending the length of the Summit. Faced with the prospect of having iDigBio fund only one Summit participant per TCN, most TCN respondents said they would likely be able to send only one or two representatives to the meeting, although

several indicated that they would prefer to send more, especially graduate students or members of TCNs.

In terms of increasing or maintaining communication and collaboration among TCNs, including those who are expiring, the most common response involved some sort of meeting including the Summit, the bi-monthly virtual TCN meetings, and sessions at professional meetings.

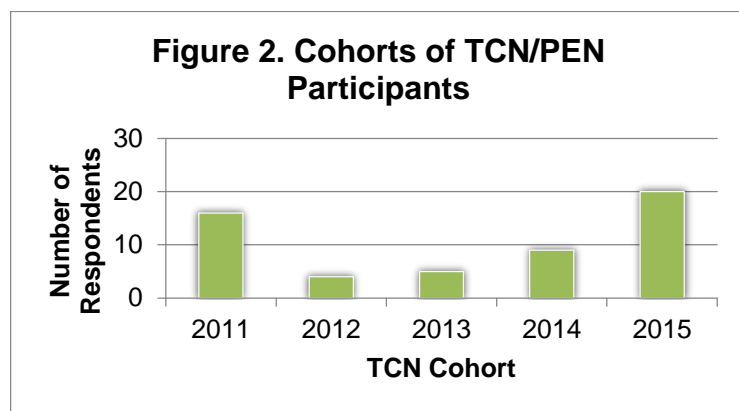
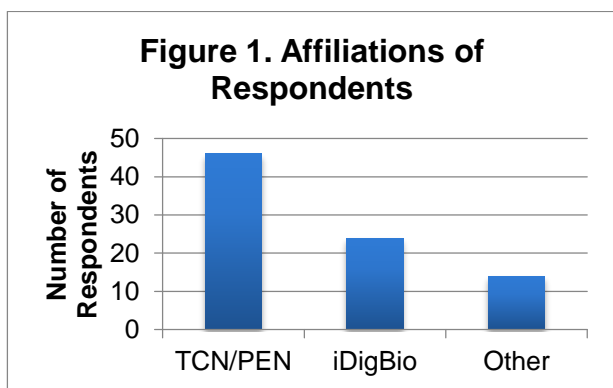
When asked to list the most important issues that iDigBio should focus on during the upcoming year, respondents most often cited sustainability, issues related to data (data quality, management, and use), education and outreach, and broadening participation.

Recommendations

1. Participation in the “new TCN orientation” should be open to anyone interested but not required of every member of a new TCN.
2. The orientation session should emphasize the services and resources offered by iDigBio and the various ways participants can get involved without focusing too much on the iDigBio website.
3. Provide a glossary of acronyms (e.g., GBIF, IPT) and emphasize to presenters and discussion leaders the importance of avoiding acronyms and jargon and/or defining them.
4. Consider a session or presentation that describes the history of the ADBC program and/or the relationships among the various organizations and agencies involved.
5. Explore alternative formats for the presentations.
6. If there is buy-in from Working Groups or the community, prioritize breakout group/discussion session topics for which clear action plans are feasible and there is likely to be follow-up.
7. Align the labels assigned to sessions (e.g., workshop, informational session, break-out) with their goals.
8. Ensure the future venues have excellent Internet capabilities and plenty of seating for informal conversations.
9. Explore ways to formalize mentoring relationships between older and newer TCNs.
10. Explore ways to better market the Summit.

Respondents

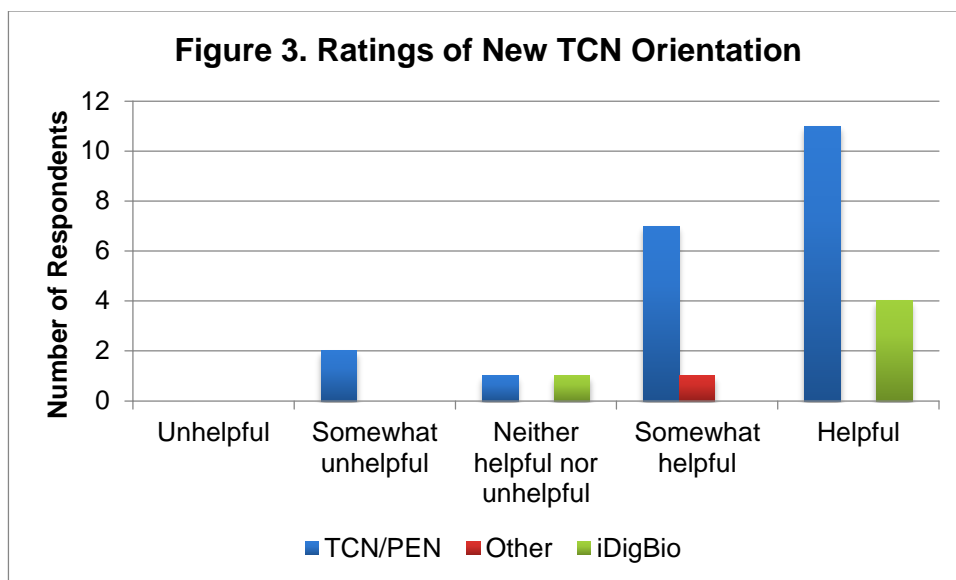
A total of 136 members of TCNs/PENs, iDigBio, collaborating groups, and NSF participated in the 2015 Summit. Of these, 84 responded to the post-Summit survey yielding a 62% response rate. Over half of respondents (55%) were affiliated with a TCN or PEN, 29% were members of iDigBio (including the External Advisory Board), with 17% indicating an “other” affiliation. Approximately 40% of TCN/PEN respondents were affiliated with the most recently funded projects, with 20% affiliated with 2014-funded projects, 20% from 2011- projects, and the remaining from projects funded in either 2012 or 2013.



Meeting Components

New TCN Orientation

In response to suggestions following previous Summits, iDigBio organized an orientation for members of new TCNs. The goals of this session were to introduce iDigBio personnel, explain iDigBio’s roles and responsibilities in the digitization effort, and make participants aware of the resources available on the iDigBio website and how to find them. Per NSF’s request, iDigBio provided a session on project management, and there was a question-and-answer session as well. Twenty-one members of TCNs, five representatives of iDigBio, and one individual from another organization rated the helpfulness of the orientation. About half of the respondents affiliated with a TCN rated the session as “helpful,” with most of the others rating it as “somewhat helpful” (see Figure 3).



Despite the positive ratings, comments suggest several ways the session could be improved. The use of acronyms proved problematic for some attendees; their use made it difficult for some individuals to fully follow the discussion while reinforcing their “outsider” status. The presentation regarding the iDigBio website and resources—while admittedly plagued with connectivity issues—was likely too detailed and comprehensive. Finally, some of the new TCN members were veterans of other TCNs, Summits, and workshops and, as a result, were already familiar with much of the content and benefitted little from the session.

Representative comments:

“A lot of acronyms were used that were not defined! It would be great, for example, to include such a lexicon in the Summit program!”

“No need for a walkthrough of the website...If there are iDigBio resources you would like to highlight, fine...Similarly, the lecture on project management was good, but was addressed to someone who has never heard of the field or managed a project before...Lots of undefined acronyms and first names of people we were supposed to know flying around on Wed and Thurs. Made it clear that I am an outsider, and I got frustrated trying to follow some of the discussions.

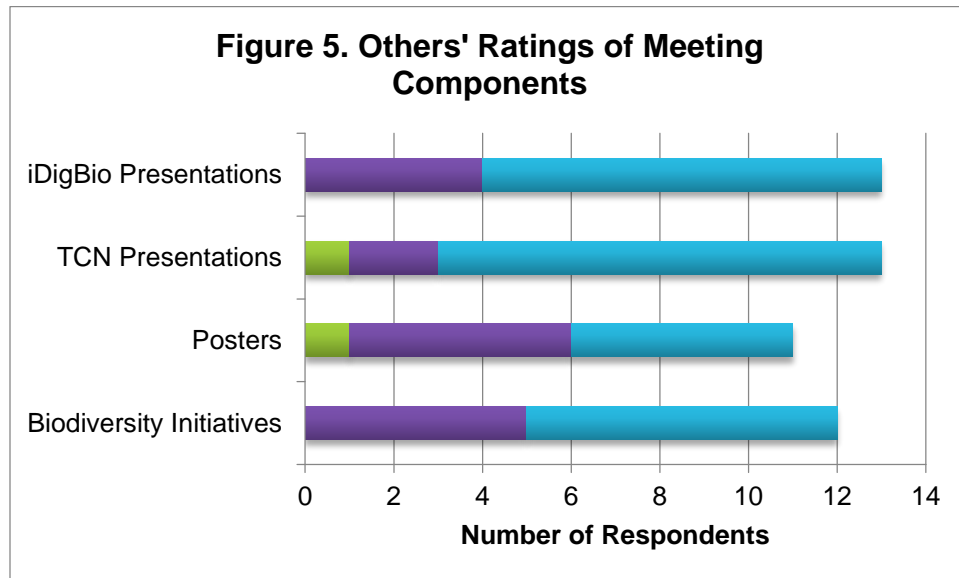
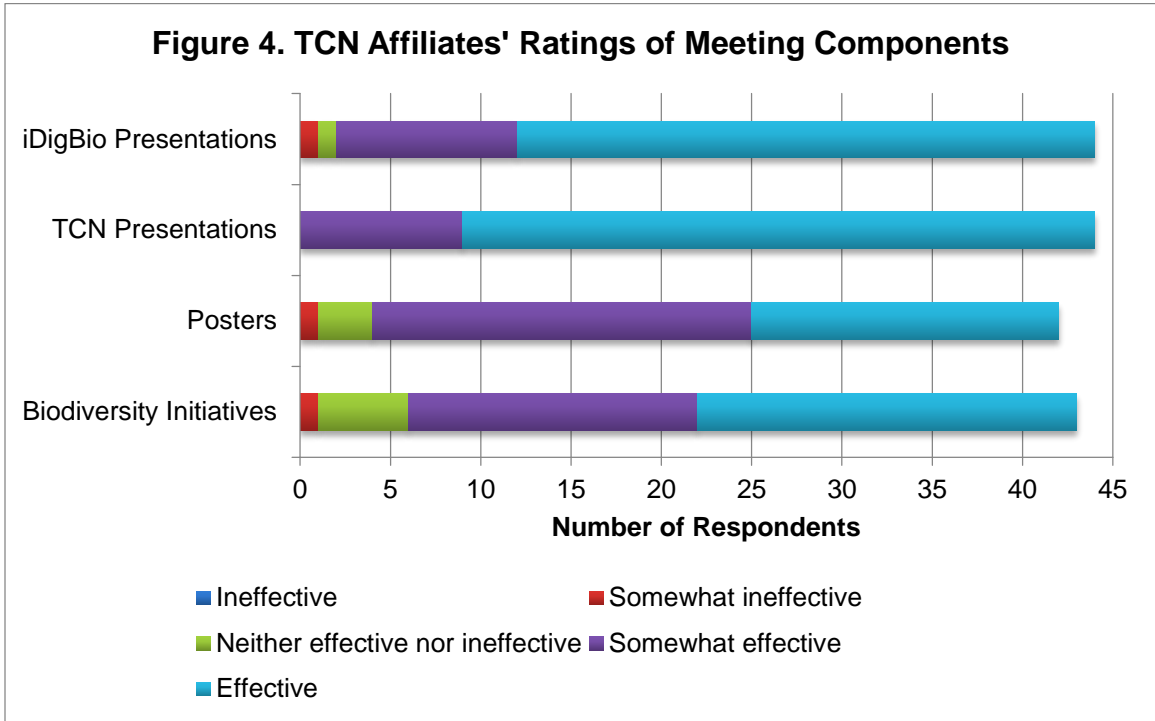
“It was an excellent introduction. I'm glad to be able to see who the NSF officers are, and hear them speak!”

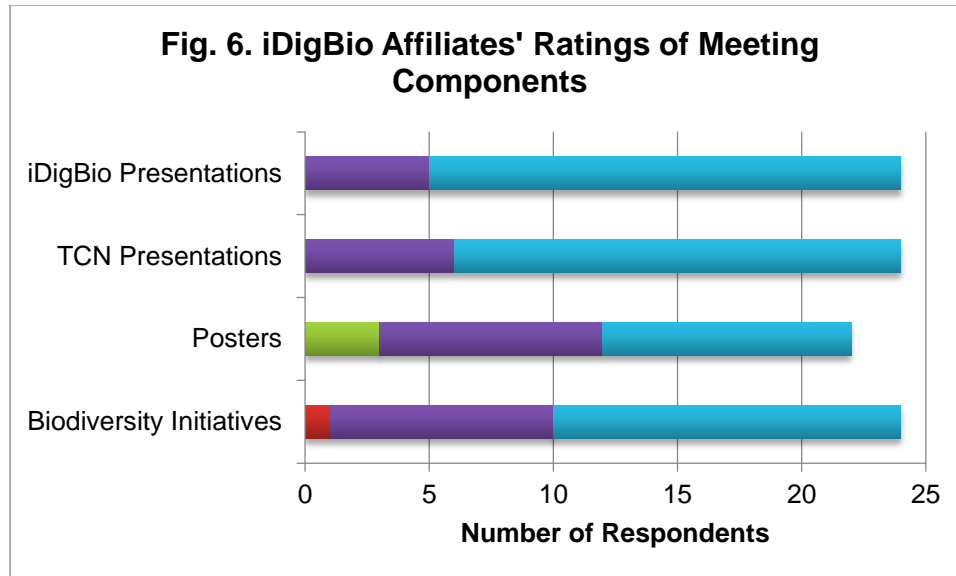
“I am part of a new TCN, but about 40% of our people have been to iDigBio meetings/workshops, and many of us are already up to speed with what is going on. So, I found the intro to iDigBio not very informative (but it needs to be done for those that are really green, so while I did not rank some of the sessions all that highly, I think they need

to be there - if we had our first TCN meeting at the Summit, then it would have been invaluable for many of our members).”

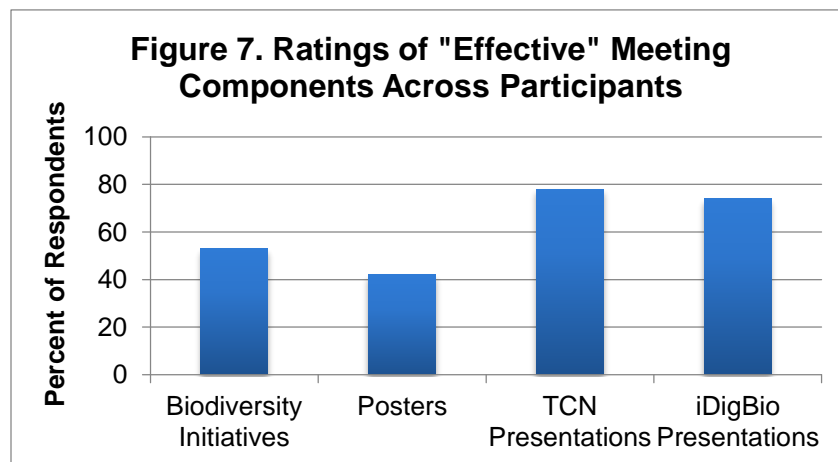
Posters and Presentations

Most (> 86%) respondents rated the presentations and poster sessions as “effective” or “somewhat effective” (see Figures 4 - 6).





The TCN and iDigBio presentations received the greatest percentage of “effective” ratings (78% and 74%, respectively), while 42% of respondents rated the poster session as “effective” and 53% rated the Biodiversity Initiatives presentations as “effective” (see Figure 7).



Only about one-half of respondents indicated that they either attended or participated in the poster sessions, but there were no differences in the ratings of the sessions between the two groups. Comments by respondents offer little insight into the relative lack of enthusiasm for the poster sessions.

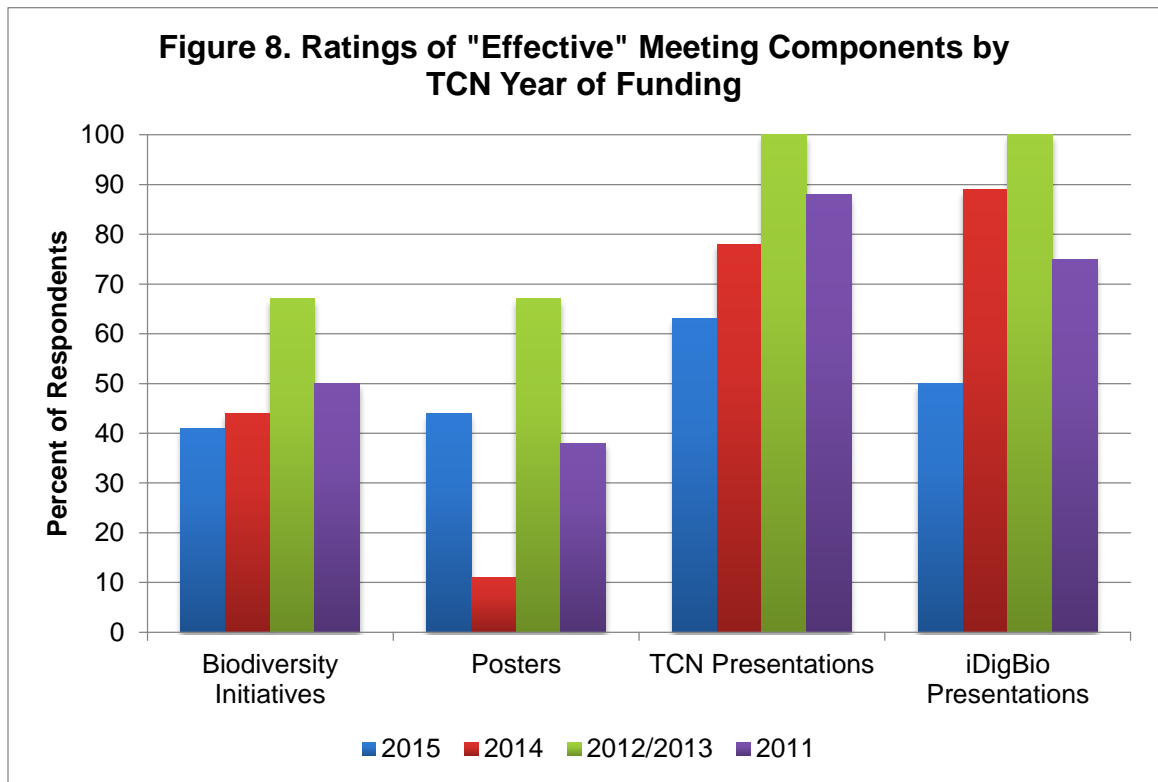
Comments do provide more insight into the lower ratings of the Biodiversity Initiatives presentations. Several respondents felt that those presenters could not do justice to their initiatives given the time allotted and suggested that alternative formats such as a panel discussion, demonstrations, or a Q & A session would be more effective for these presentations.

Representative comments:

“The partner presentations were interesting, but it’s tough to cover much ground in 10 minutes. It might be interesting to host a partners’ forum, where multiple partners (GBIF, BISON, NatureServe) could field questions about their work and stimulate thinking about collaborative opportunities. Something a bit more interactive would be nice.”

“I think a panel discussion with the broad range of biodiversity initiatives might be a good alternative to having them all give presentations. This format would highlight similarities and differences in approaches and solutions to challenges and opportunities facing the community.”

The ratings of the meeting components by TCN affiliates varied by cohort (see Figure 8). A smaller percentage of new TCN affiliates rated the TCN and iDigBio presentations as “effective” than did those from other cohorts. (Note that responses from TCNs funded in 2012 and 2013 are combined due to low numbers). Possible explanations include fatigue (given that the new TCN members had a longer Summit than the others) and information overload. It is also possible that the content was more meaningful to members of the longer-funded TCNs, or that veteran Summit attendees rated the 2015 meeting with previous ones in mind.



Despite the high ratings given to the TCN presentations—one individual described them as inspirational—others noted that the sheer number (combined with the iDigBio ones) made it

challenging to stay focused. Reducing the number of talks in some fashion, varying the format across cohorts (e.g., panel discussion or Q & A for the expiring projects), or focusing on crosscutting themes were suggested as possible solutions.

Representative comments:

“I really felt like my time could have been better used than sitting through the individual TCN presentations. More emphasis on commonalities and less emphasis on the details of specialized domain knowledge would be helpful.”

“The iDigBio presentations were interesting and useful, as were the more "senior" TCN presentations. I wonder if you could move to a system where the most senior TCNs tell us about achievements and pitfalls and recent TCNs introduce themselves to the audience but the intermediate (Year 2-3) folks don't report. Or maybe they do it differently - like as a panel...What if some of the sessions were about topics, like: Workflows, E&O activities, and getting people to use your data?”

“I get most inspired by the presentations from each TCN and see all that they're accomplishing and the great creativity that each has brought to their projects.”

“I think it might be useful to have a panel discussion or two instead of all of the presentations on TCN progress. Most of the information about TCN progress is already in the program and I found the presentations to be redundant and often uninteresting. The commonalities with other kinds of data management and digitization were interesting, but the details of the different domains were often beyond my level of knowledge or too focused on minutia to hold my interest.”

“I think it was perfect the way that it was. The number of presentations was nice. Presentations were concise and fast-paced, which was GREAT.”

Discussion Sessions

Summit attendees had the opportunity to participate in 4 discussion sessions selected from 12 topics. Four of the sessions (citizen science, project management, iDigBio resources, and iDigSTEAM) were primarily informational in nature and designed to increase participants' awareness. The other sessions (collaboration/communication, attribution, data use, sustainability, research tool development, education and outreach, data management, Symbiota) had a different goal—to address important issues and plan next steps.

The sessions on iDigBio resources, collaboration/communication, and Symbiota were rated the highest (see Figures 9 & 10). Note: There was also an ad hoc session on “Scaling it Up” that was not included in the evaluation but appears to have been well attended and effective based on comments elsewhere in the survey and presentation given in the wrap-up session.

Figure 9. Self-reported Changes in Awareness or Understanding Following Participation in Discussion Session

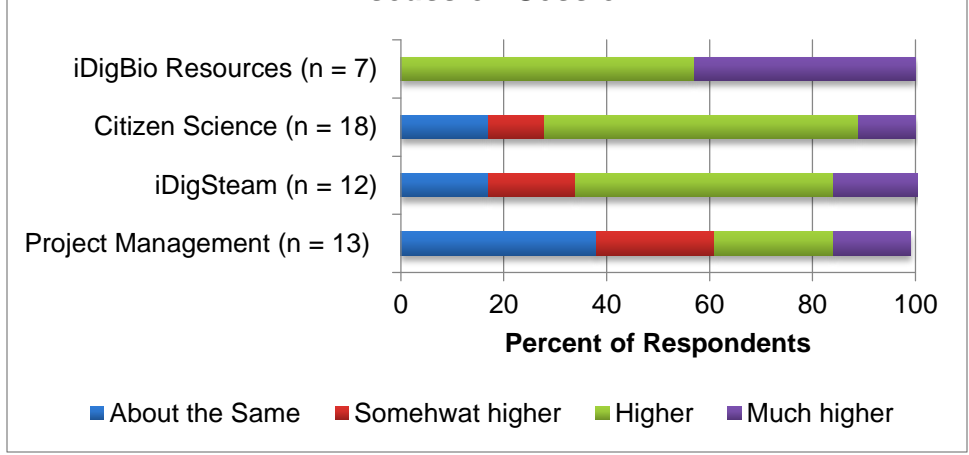
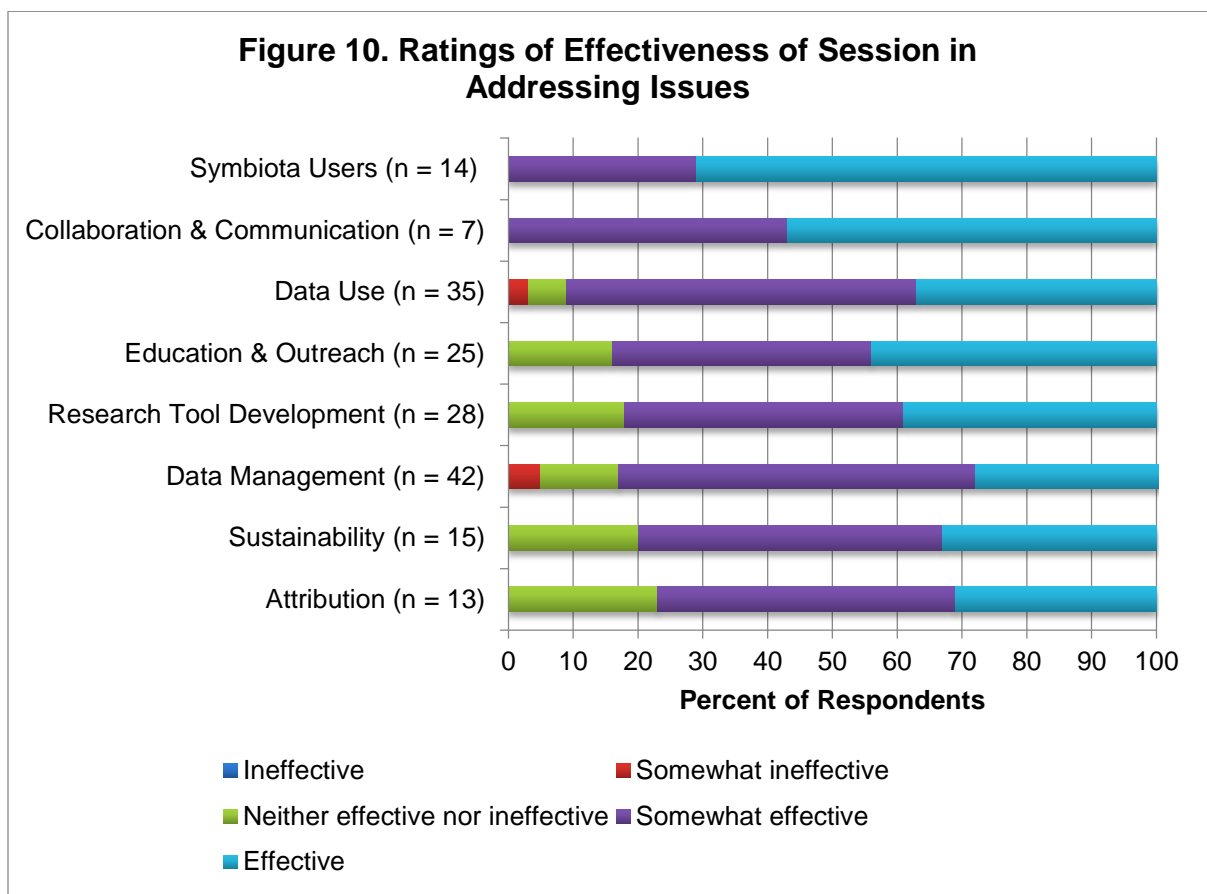


Figure 10. Ratings of Effectiveness of Session in Addressing Issues



While some attendees found all of the discussions interesting and engaging (even if off-topic), others noted that the discussions were somewhat amorphous and/or doubted there would be any significant follow-up. If the expectation is that these sessions will lead to concrete outcomes (e.g., decisions, priorities, plans), then the sessions might be limited to those issues where that is a legitimate possibility and session organizers should structure the sessions to make that

happen. Alternatively, if a more varied set of sessions is preferred, using different labels (e.g., informational session, workshop, brainstorming, etc.) for sessions with different goals would help inform participants' expectations as to what will happen in each.

Representative comments:

“Break-out sessions were great - short, but with a mission.”

“I would like more solutions during discussion groups in addition to raising new issues.”

“We were getting somewhere in that time. People were excited to participate. I think we should have all entered our email and names on one list to be followed up later by the group leaders.”

“The discussions were good but a lot still needs to be worked out. Building on this there may be new interest groups added to iDigBio.”

“While the session helped to document needs in the community, if feel it lacked an action plan: Starting up yet another working group is not an action plan in my mind.”

“Each of these discussions identified important issues, areas of concern, or problems that require a solution, and in this sense they were effective. However, I have no confidence that there will be any meaningful follow-up to any of this, and in this sense they likely were ineffective.”

“It might be nice to have action items that were raised at this meeting or elsewhere in advance that working groups then actually try to solve together or generate a solid working plan at the meeting vs only coming up with ideas.”

Summit Planning, Organization, and Venue

Summit Schedule

Across participant types (TCN affiliates, iDigBio members, and others), 100% felt the Summit offered valuable networking opportunities, 99% agreed that the issues discussed were timely and important, 94% agreed that communication about the Summit was timely, and 90% felt time was distributed appropriately across the various formats. Ratings by each of the participant groups are shown in Figures 11 – 13.

Figure 11. Ratings of Summit Organizaition by TCN Affiliates

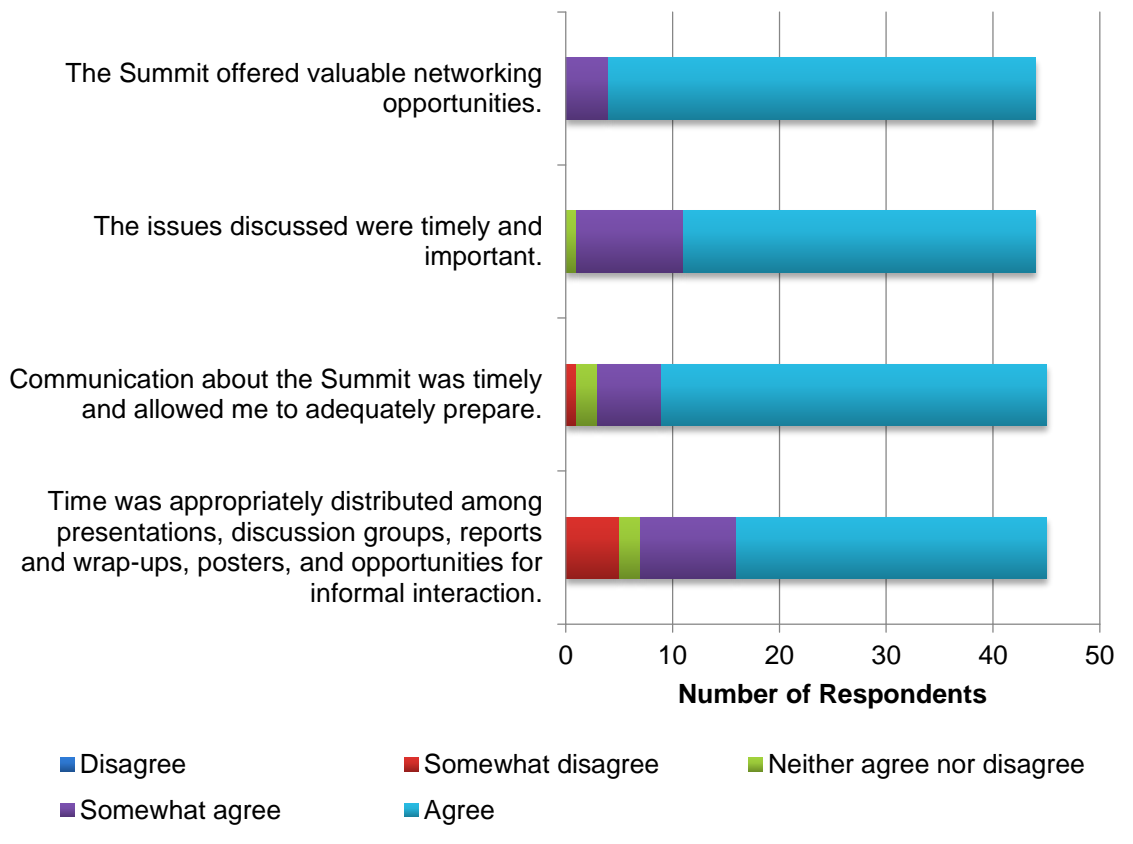


Figure 12. Ratings of Summit Organization by "Others"

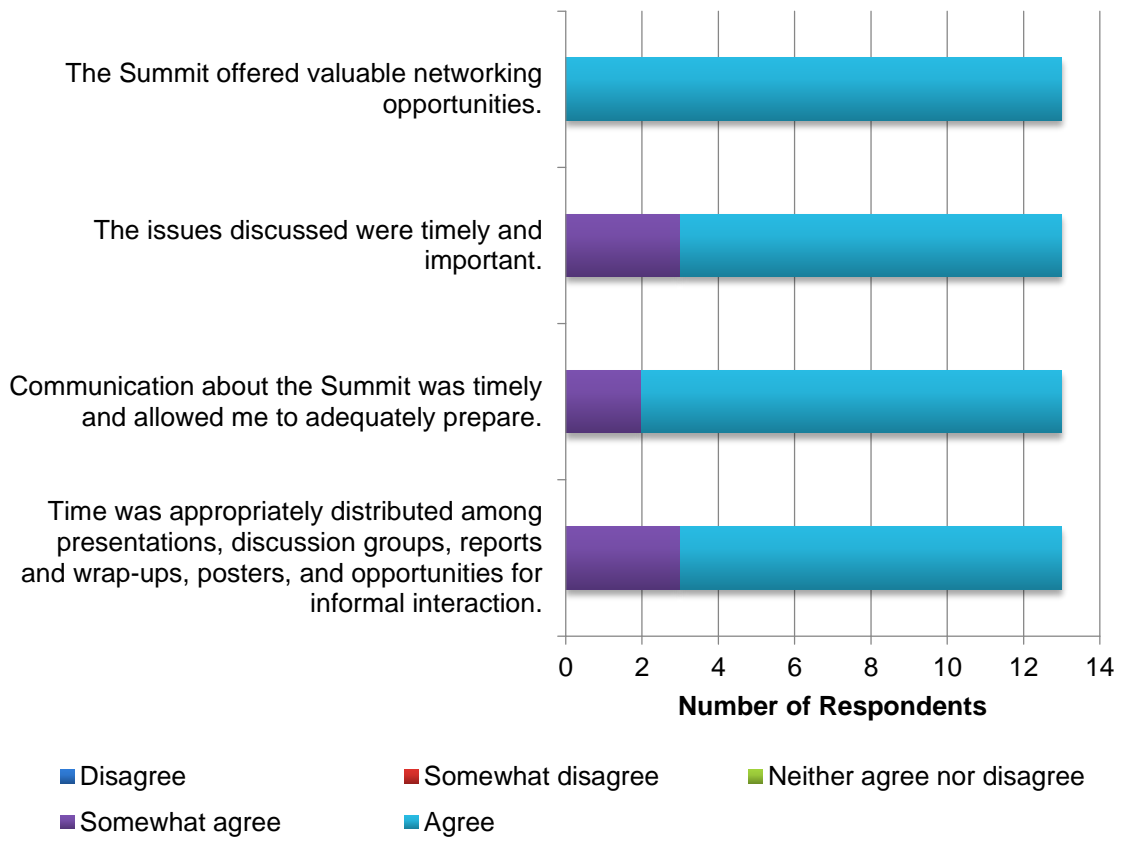
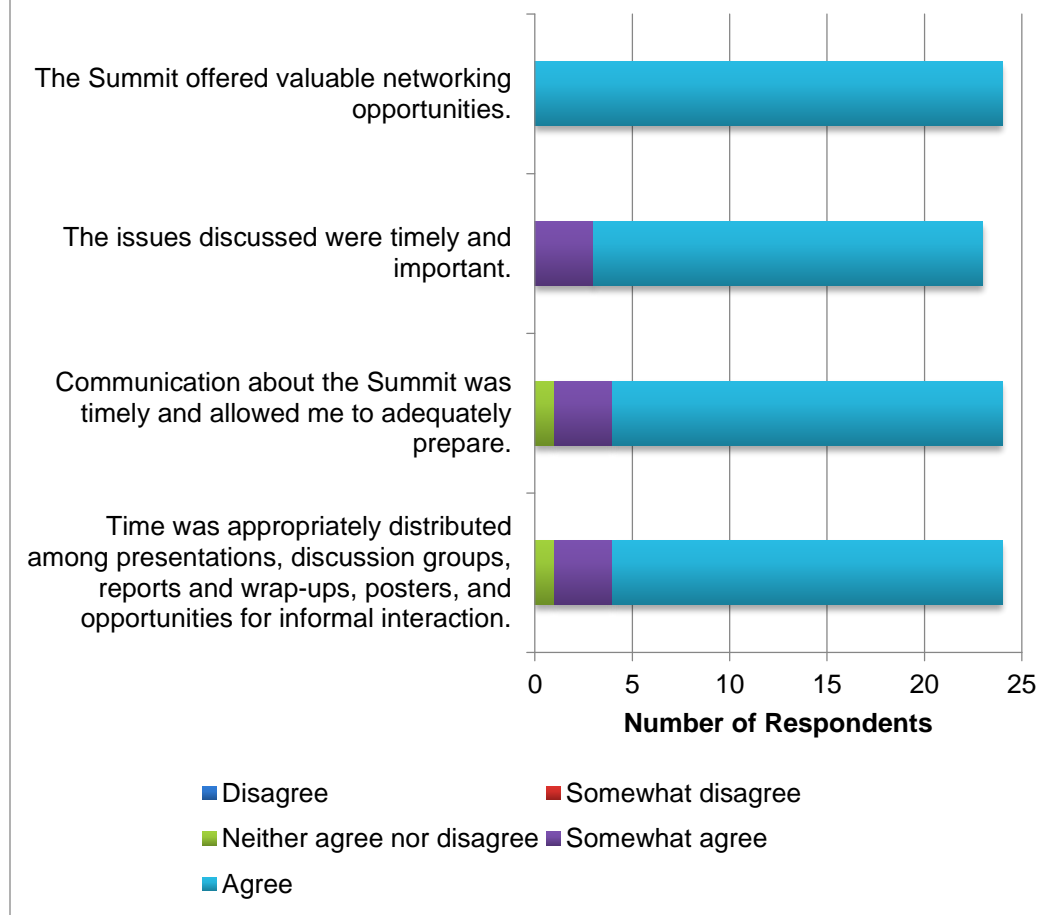


Figure 13. Ratings of Summit Organization by iDigBio Members



Representative comments:

“Planning was excellent and material covered was excellent. A little too much time allotted for food/breaks/posters, but TCN and other efforts talks very fast-paced (awesome!).iDigBio folks, as always, go above and beyond in terms of organization, promoting collaboration, encouraging discussion. ADBC is such a success because of their commitment and hard work. I was also impressed that NSF staff were present for all of the meeting.”

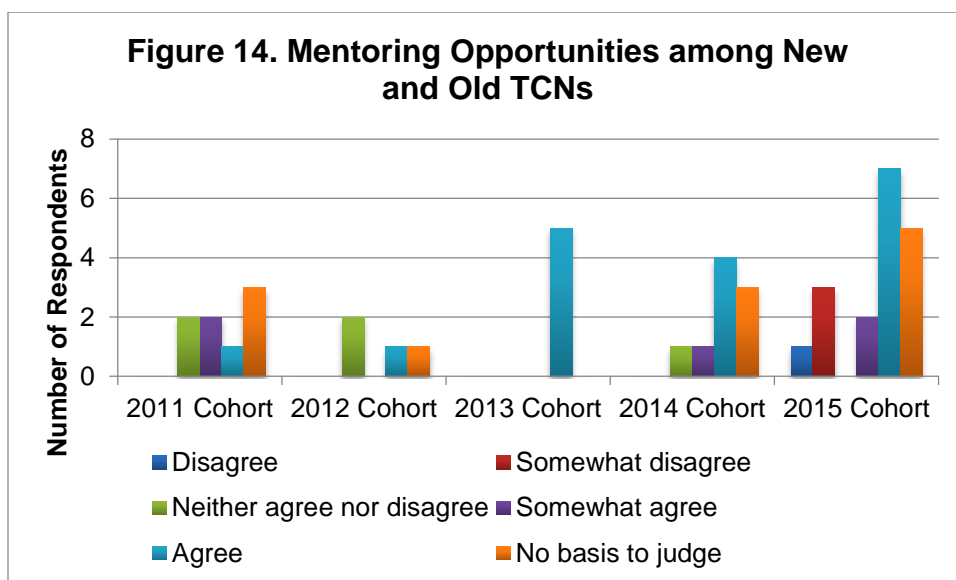
“Have more, but shorter breaks between presentation sessions. I would be in favor of extending the meeting if it were possible to have fewer concurrent sessions. I feel like I missed out on some great discussions going on in the other topic sessions.”

“I would have liked to participate in more than just 2 discussion groups.”

Networking and Mentoring

As noted above, everyone felt the Summit offered valuable networking opportunities and all but one individual used the Summit as an opportunity to meet with colleagues. All 46 respondents from TCNs/PENs used the Summit to meet with colleagues with half scheduling these meetings in advance. (Note that this figure is impacted by the requirement that the new TCNs hold meetings during the first day of the Summit). As always, comments reveal that the opportunity to network with colleagues is the most impactful aspect of the Summit.

The Summit seems to have been somewhat less successful in providing mentoring than networking opportunities in that only 41% of TNC affiliates “agreed” that there were sufficient opportunities for mentoring of newer TCNs by experienced ones. That said, only four TCN affiliates felt that mentoring opportunities were lacking (i.e., they either “disagreed” or “somewhat disagreed” that there were sufficient mentoring opportunities) (see Figure 14).



Summit Venue

The only question on the survey explicitly related to the venue addressed the use of the ad hoc meeting space. About half of the respondents (46%) used this space for TCN meetings, a meeting between the iDigBio PIs and NSF, WeDigBio, or discussion of a range of issues including future projects and collaborations. Comments show that participants valued having access to a quiet place with internet service within the meeting venue.

Responses to other questions throughout the survey reveal a range of reactions to other aspects of the venue. Participants made positive comments about the food and the reception at the U.S. National Botanic Garden. Respondents noted a few limitations with respect to the hotel including poor internet connectivity in some spaces, problematic acoustics, lack of natural light, and few places to sit and have a casual conversation beyond the meeting rooms. Some (most notably members of newly funded TCNs) felt that having the meeting in an expensive locale

was hard to justify given what they perceived to be a limited involvement of NSF and other organizations based in the D.C. area.

Representative comments:

“The venue made sense logistically (i.e., travel-wise, meeting space, accommodations) but aside from the evening event at the botanic garden it was pretty dull. It's not clear to me why Washington, DC, was chosen, since the meeting wasn't open to non-ADBC personnel (other than a few invitees) and didn't take much advantage of the proximity to other government and NGO personnel.”

“A few more places to sit and talk with others.”

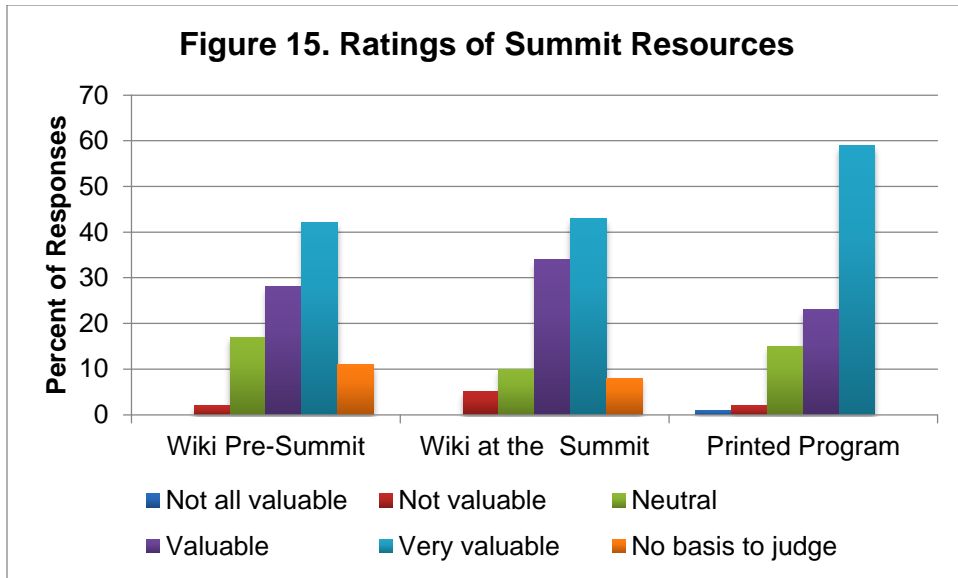
“Reception at the botanical garden was absolutely stellar!”

“Everything was in close proximity and focused, which was good. When it's too spread out, participants get delayed and wander too much.”

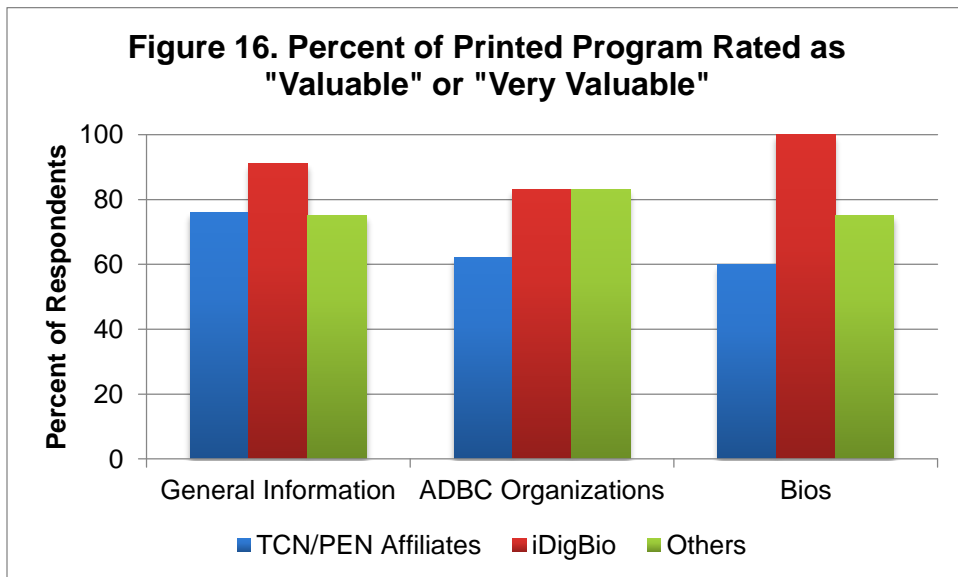
“Unfortunately the style of room layout and acoustics made discussion a little tricky.”

Summit Resources (online wiki, printed program)

Most respondents found the Summit wiki and printed program to be of value. Seventy percent rated the wiki as “valuable” or “very valuable” before the Summit, while 77% found it “valuable” or “very valuable” during the Summit. Over 80% (82%) rated the printed program as “valuable” or “very valuable.” Comments reveal that participants appreciated how quickly presentations were added to the wiki and that they had already directed colleagues to the wiki at the time they completed the post-workshop survey or anticipated they would in the future. One TCN lead regretted that they had not put more time into updating their wiki on the iDigBio website in advance of the Summit and promised to do so.



Overall, members of iDigBio and other organizations found the printed program to be more valuable than did those affiliated with TCN/PENs (see Figure 15). . As expected, a small percentage (7%) were opposed to a printed program—at least as measured by comments. Others noted the program could be a valuable resource to share with administrators and one individual suggested the program be published on figshare (figshare.com) so that it could be easily referenced.



Representative comments:

“I liked having photos, names, affiliations, etc. This made it easier to meet new people and stay in touch post meeting. Getting it prior to the meeting allowed us to set up ad hoc meetings.”

“I have already used some of the resources highlighted above since I returned from the Summit, and have directed some of my colleagues to these.

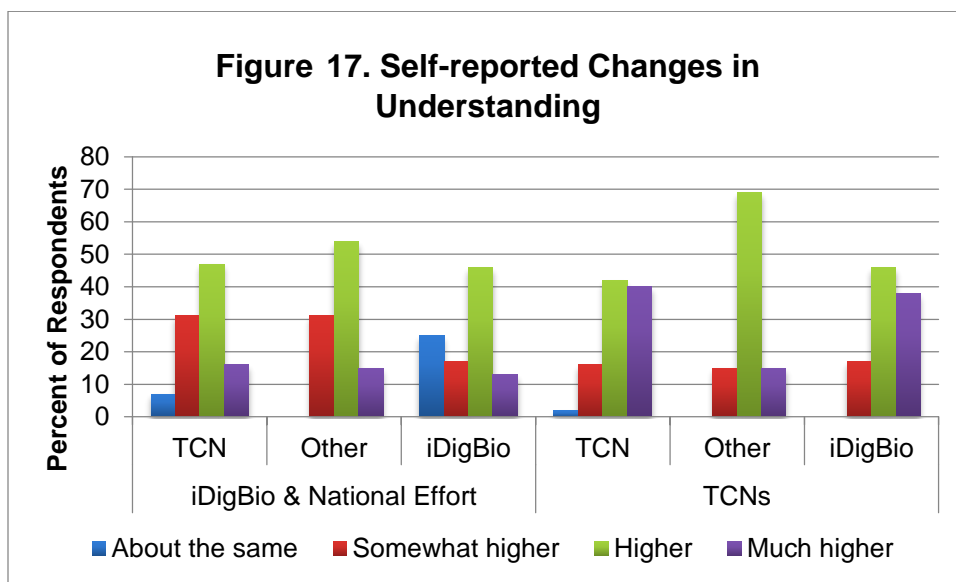
“I appreciated having the presentations posted on the wiki in a timely fashion.”

“The printed program was beautiful and handy during the Summit. However, I think if I want to revisit or share features about the Summit in the future, I will use the wiki, particularly because I will be able to view the presentations.”

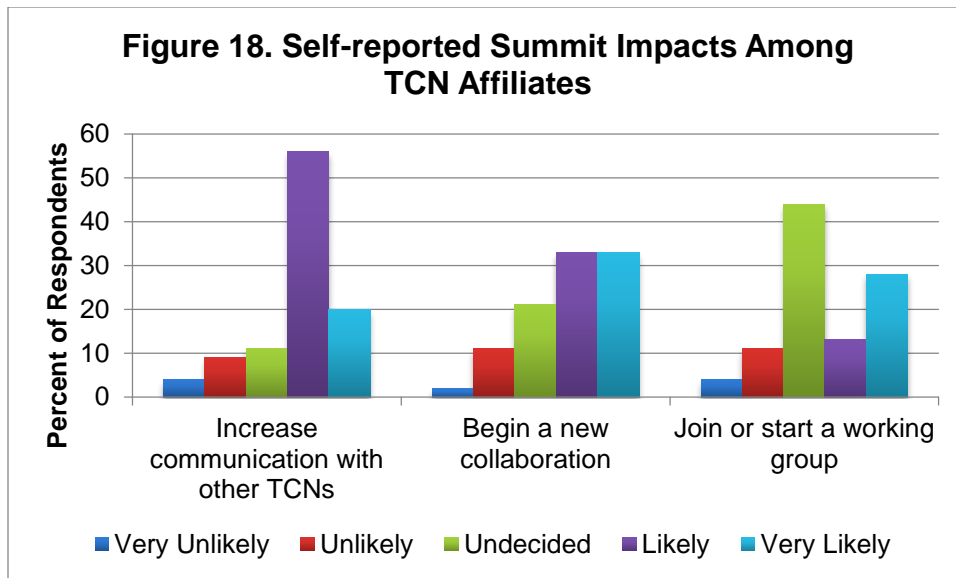
“I don’t think we should be spending money on printed resources, but the actual content in the summit program was very valuable.”

Summit Impacts

A majority of respondents from each of the three participant groups reported increases in knowledge about iDigBio, the national digitization effort, and TCNs as a result of the Summit (see Figure 15).



A majority of those affiliated with TCNs also reported it “likely” or “very likely” that they would increase communication with other TCNs and/or begin a new collaboration as a result of the Summit (see Figure 16).



When asked to describe any other benefits accrued by participating in the Summit, respondents cited networking, feedback, increased understanding, moral support, and a renewed sense of purpose.

Representative comments:

“I’ve been to all of the summits and I hope to go to many more. This is singularly the best opportunity for me to network with collections people across taxa and to talk about stuff I care a lot about. It was a very positive event and I learned a ton as always.”

“I am thinking of proposing a new TCN, and the Summit gave me an opportunity to assess if the scope of work is or is not already represented among the funded projects.”

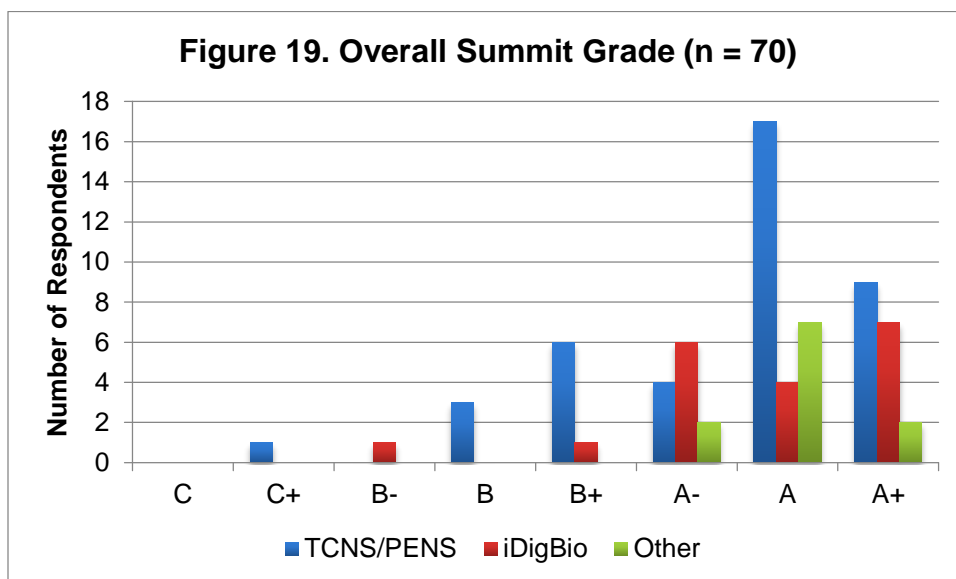
“Networking with other researchers and professionals dealing with the same issues Getting excited about getting other natural history collections/herbaria in my state involved in providing data. I’ve already begun working on this!”

“I got a lot more out of this summit than the last, because I knew more. I made several valuable contacts that will lead to new publications and more PEN applications, as well as to more postdoctoral fellowship area 2 applications.”

“It was great. I learned a lot and generated new connections that I hope will lead to the digitization of new areas in our collection.”

“Despite my ‘suggestions for improvement,’ I greatly enjoyed the Summit! And I wish that I’d had the opportunity to attend, or to gain this level of knowledge in some other way, before starting my first TCN involvement (in 2011). It would have greatly helped!”

The 2015 Summit received an average grade of “A,” with 84% of those who answered the question awarding a grade in the “A” range.



Looking Toward the Future

Increasing collaboration and communication among TCNs/PENS

We asked Summit participants for their thoughts about ways to increase (or maintain) collaboration and communication among TCNs/PENS as their numbers increase and earlier TCNs wind down. The most common response (n = 12) focused on meetings, including the bi-monthly Internal Advisory Committee meetings, annual Summits, and mini-summits held at professional meetings. The second most frequent response (n = 6) referenced funding, including funding for travel to meetings and grants to support collaboration. Other suggestions included promoting collaborative research (n = 3), a dedicated area on the iDigBio wiki (n = 3), forming groups with shared interests that could meet at Summits or virtually (n = 2), and establishing an explicit mentoring system with new and experienced TCNs (n = 2).

Representative comments:

“Increase focus on doing research and building tools that go across TCNs and are linked to ongoing initiatives like Open Tree of Life, rOpenSci, Encyclopedia of Life, Global Biotic Interactions, Global Names. I think that sharing data is not enough - it has to be linked and used to bring folks together and enable interesting research outcomes.”

“Consider topical or taxonomic subgroups for virtual (or pre-Summit) meetings.”

“TCNs with related interests could maybe have a collaborative workshop to share ideas and increase collaboration.”

“One thing would be to publicize the IAC meetings more widely - only a very few participants outside of lead PIs ever attend. Form working groups based on organism type being digitized - one advantage here might be that folks would have a better overall picture of what had been/ is being digitized by whom in the community.”

“Having monthly meetings was incredibly helpful for the ...Project. I'd like to see bi-monthly meetings across TCNs.”

“I think there are some "themes" that have developed - terrestrial organisms, plants, insects. Could you sponsor sessions/symposia at national meetings where people can re-convene and talk about taxon-specific digitization and simultaneously reach out to others (maybe ecologists to start) who may not have considered the importance of digitization and availability of data.”

“Focus on us as future workshop leaders and mentors for new TCNs. Might even come up with some kind of "buddy" system. Please remember that active participants are not always the project PIs.”

Future Summits

We asked participants both a general question about ways to improve future Summits and a specific question eliciting their thoughts about replacing presentations with a plenary speaker or panel discussion with the prospect that doing so may extend the length of the meeting. With respect to the general question, the most frequent response was that no changes were needed. That said, a few participants did suggest reducing the cost of the Summit by either offering room sharing (which was offered for this Summit but underutilized) or finding a less expensive venue; shifting the focus away from the HUB and ADBC and/or toward research uses; and, as mentioned earlier, being more thoughtful about the reliance on acronyms/jargon.

Sixty individuals answered the question about the plenary speaker/panel discussion; 30 (50%) responding favorably to having a plenary speaker, panel discussion, or both. More respondents responded favorably to the idea of having panel discussion than a plenary speaker (16 vs 5 respondents, with 9 happy with either). Nine respondents commented that the current format works well and did not need to be changed, while one explicitly said they did not like the idea of having a plenary speaker, two responded they did not want a panel discussion, and one other rejected both ideas.

In terms of the length of the Summit, 11 respondents were in favor of adding one-half of a day or a day, while 12 did not want the Summit to be longer. Given that nine other respondents are satisfied with the current format, most probably do not want the Summit to be extended.

As noted above, 99% of respondents felt the issues discussed were timely and important (see Figures 9 – 11); however, we did receive a few responses to an open-ended question about any

issues that they thought deserved more coverage in the 2015 Summit. These responses might be considered when planning Summit VI. Issues included data use (and strategies to increase use (n = 3)), sustainability (n = 2), outreach to administrators, lessons learned, data cleaning, workflows, and attribution.

We asked the TCN respondents how many representatives they would likely send to a Summit if iDigBio could cover the cost of only one. Thirty individuals responded with answers ranging from zero (n = 3) to three (n = 2). Most said one (n = 12) or two (n = 8) although half of those who responded said they would like to bring additional people (e.g., representatives of TCNs, graduate students) as they think the Summit is a valuable experience.

Representative comments:

“A less expensive venue would be really good. These projects operate on limited budgets, and projects fortunate enough to have travel expenses included in their budgets typically only have enough for 1 or 2 meetings at most. Two hundred dollars per night to stay at the Hilton seems like an unwise use of funds. Perhaps next time we could find a conference area located within close walking distance to more affordable hotels?”

“A day of mini hackathons relevant to the different working groups would be useful.”

“It might be good to choose some exemplar data users - people doing research RIGHT NOW with the data generated from iDigBio, to better assess demand-driven aspects of the data.”

“Not sure but think would be refreshing to have outside experts or speakers to talk on topics applicable to iDigBio.”

“I like the idea of adding time for a plenary speaker or a panel discussion, but I'd rather add additional time than replace any of the current arrangements with these options.”

“I think that a plenary speaker or panel discussion would be a great addition. However, I am not keen on the idea of adding another day to the meeting. Two days is plenty (with travel days the iDigBio meeting requires four days). Many of us attend other conferences throughout the year.”

“I would not mind an extra day for the summit. One thing that I think might be useful is a meeting of all of the TCNs that work on similar organisms - e.g., all of the vascular plant projects - so that we could discuss common problems and solutions. I'd rather see that than a plenary speaker. A panel discussion might be good, esp. if we could focus on problems/solutions.”

“A panel discussion might be good to add. Extending the Summit for half a day would be fine.”

“I think panel discussions would be very useful. Especially in bringing forward and examining diverging viewpoints. Making the summit longer is not desirable, but perhaps they could replace some of the presentations. I think a lessons learned session, about what was tried and didn't work out well would be really valuable.”

“I think the sessions above were very effective as they were and I don't think they needed supplementation and should not be replaced.”

“I think the way it was structured was good, and the length of the meeting was as long as it should be.”

“Seems like a good format as is.”

“Not sure I really want a plenary speaker at this meeting -- there are plenty of other venues for that (e.g., SPNHC, other society meetings). Panel discussions might be okay, but I like the various discussion group sessions -- I feel it gives the best possibility for everyone to have a voice. I think the format of this meeting worked fine.”

On topics that deserve more coverage:

“We probably need to address sustainability more directly, at multiple levels. Also need to address use of digitized data outside our own community more directly. At the next Summit, iDigBio should try to have some representatives from potential users of our data. Should join forces with BCON to find representatives of companies to participate.”

“Some of outreach/education for kids/youth could be replaced with strategies for outreach to administrators/boards/trustees.”

“I think a discussion of lessons learned, course corrections, etc. would have been very helpful.”

On sending representatives with limited funding:

“One. [but] I think it is important to send two or three people per project.”

“I (lead PI of a TCN) would try to sent at least one addition, and make sure that at least one from a PEN can join the Summit.”

“At least an additional person. This is something TCN participants should experience. I was very glad to be able to come this year.”

“Would depend on location and timing. About half of our TCN have commitments (e.g., small children or teaching) that can limit travel so time is as critical as expense. Also whether the meeting is proximate to another meeting.”

Priorities for the upcoming year

Finally, we asked for input on the three most important issues that iDigBio should focus on in the upcoming year. As in years past, sustainability was the most frequent response (n = 22), followed by data quality (n = 13), education and outreach (n = 13), data use (n = 12), and broadening participation (n = 10).

Representative comments:

“Sustainability and promoting education about data sustainability among our community of scientists.”

“Sustainability and helping institutions understand they need to invest - again this has to come at a higher lever. Maybe there needs to be an administrative carrot.”

“Making these resources sustainable into the future”

“Continuing to encourage groups to submit quality standard data - too many offshoots on the type of data submitted is probably not really that important; it would be nice if data "far outside" the standard fields were done simply without adding too much to the complexity. It might be nice to analyze how many fields are used and how often to prioritize these fields.”

“Increasing research integration with digitization. How do you get data quality feedback from researchers to data providers?”

“Improving data quality at the root: in museum databases.”

“Data storage issues for the material produced through digitization; there is not a preservation model available yet.”

“We need to start roping in teachers/school educators into the program. How to use the digitization data in lesson plans.”

“Increasing digitization speed”

“Data mobilization”

“Getting people to use this information - showcasing research that was only possible with this resource providing access to bioinformatics training/people.”

“Outreach to potential users outside our immediate community”

“Identify major data gaps that could lead to the formation of new TCNs”

“Bridging the gap between scientists and economists, sociologists, etc. to encourage cross-disciplinary research.”

“Digitization of under represented [collection types]”

“Data sharing with global portals”

“Increasing international collaboration”

“Educating the administrators of stakeholder institutions about the importance of scientific collections, and how they are used.”

“Increasing awareness of the program.”

“Communication to stakeholders outside of the traditional collections community.”

“Helping to document the improved efficiency of data management afforded by digitization (e.g. loans, digitization before arrival into collections, etc.)”

“Helping to improve tracking and understanding what data is being used for and by whom (classification of users, not necessarily individuals, and general purpose at a basic level) - might help to drive funding”