

Group 2 Notes

Day 1 Prompt: Given a billion dollars, describe your plans for an Action Center, addressing the new science that would be enabled, the importance of an Action Center to the average person, and examples of AC-based research that meets societal needs.

Action Center is an entity to facilitate and advocate, connecting nodes as a central HUB, standardizing and organizing

AC name ...

Is "natural science" inclusive enough?

Language is essential (e.g., biodiversity informatics, IT)

Communication (e.g., amongst peers, broader audience) ...

With congress

With peers

With communities

Knowledge, context, and interpretation of a specimen;

- One service is vetting data
- Certifying body; tracks compliance for Nagoya
- Promote, reuse, and fill gaps

Describe your plans for an Action Center

Greg Watkins-Colwell

Emily Braker

Ruediger Bieler

Jorrit Poelen

(personal scribbles)

Action center facilitates communication and collaboration with non-science entities with the goal to advance the impact of biological collections on society at large.

Action center employs facilitators to act as envoys to congress, industry,

Action center helps to mobilize, and coordinate existing institutions, program societal withing the biodiversity collections community and communicate their vision and result to the non-biodiversity collections community.

Summarize, articulate, communicate internally (biodiversity collection community) and externally (congress, nsf, global alliances, library of congress) the available or needed capacities needed

to better understand and perhaps anticipate, methods to make our bioeconomy more resilient and equitable.

Dawn Roberts

Charlie Willis

Action Center would be proactive communicating the biodiversity crisis, documenting crisis through existing collections and growing collections; extension service- advisors help you write grants; offer grants

Sharon Grant

Train, teach, and make connections

Addressing the new science that would be enabled

Examples of AC-based research that meets societal needs

Day 2 Prompt: Each group will identify one or more stakeholders that are directly involved with addressing a societal issue. Identify the various ways that you (as a stakeholder) would learn of, engage with, and benefit from association with the Action Center, and vice versa.

Draw a figure or diagram documenting these, and likely other, connections.

Stakeholders:

- Researchers
 - Bioscience
 - arts & humanities
 - History
 - Artists
 - bioengineering
- Educators
 - K-12 teachers & students
 - university professors & students
 - informal educators
- Conservation & wildlife agencies
 - Government
 - NGO
- Community scientists (engaged public)
- Community organizations
 - birding groups, master gardeners
- Professional societies
 - SPNHC
 - Taxonomic Groups
- Agriculture & fisheries
- Industry/commercial
- Government

- Legislators
- State
- Federal
- Regulatory bodies
- Municipality
- DoT
- Funding agencies
- Research institutions
 - Museums
 - Zoos
 - Herbaria
 - Arboretums
- Indigenous groups
- Media
- Landholders/developers
- Non-engaged public
- International connections (NAGOYA)
- Data aggregators (platforms & portals)
- Collections/museum professionals
- IT Department

Science Communication: AC would need to reach university students, basics of biodiversity data & research; workshops, lectures, resource lists, “train-the-trainer”

Specialists: Feasibility check, connect tools, networking/making personal connections

Postdoc Use Case: Charlie

-- Getting the idea

1. Made aware of resources GBIF / iDigBio through Ph Thesis through colleagues/peers not conferences word on the street .(Note: not all institutions have same community; example googling ZooMu gets Zoom U)
2. Identified question: interested in collect as much plant data and model how this would change given climate change

-- Getting the funding

3. Former advisor made Carlie aware of the fellowship(Note: not everyone has advisor or good advisor)
4. Proposal written while a Phd (Note: Some not fully funded and have to work job to pay bills;; English is not first language for everyone)
5. Advisor reviewed proposal prior to submission
6. Collected letters of support (Note: Not everyone has a network of supporters)
7. Submitted to the environment at Harvard reviewed

-- Developing methods to help answer questions

8. Through institutional support "free" (e.g., Harvard cluster folks), Life Mapper, personal connections. Supporters's grant aligned with your desire to collect plant distribution.
9. Using existing digital collections (no need to collect physical specimen, no need to get permits)
10. Charlie explicitly removed undersampled plants
11. Charlie needed IT help to help collect, wasn't able to do this on my own
12. Charlie collaborated with life mapper team (KU)

13. ended up species distribution model
14. Got stuck because was "too" fine a scale, needed to computational limitation due to skills / available capacity / expertise in analyzing large volumes of interested data
15. After getting stuck, I stopped working on it, didn't know how to continue. None of this was published or in any way distributed through professional societies. (Note: no feedback provided to community beyond direct collaborator)
16. Now, I've continued my activities in education on pedagogy, a different field altogether.

If the Action Center existed, this is what might have happened...

-- Getting the idea (same)

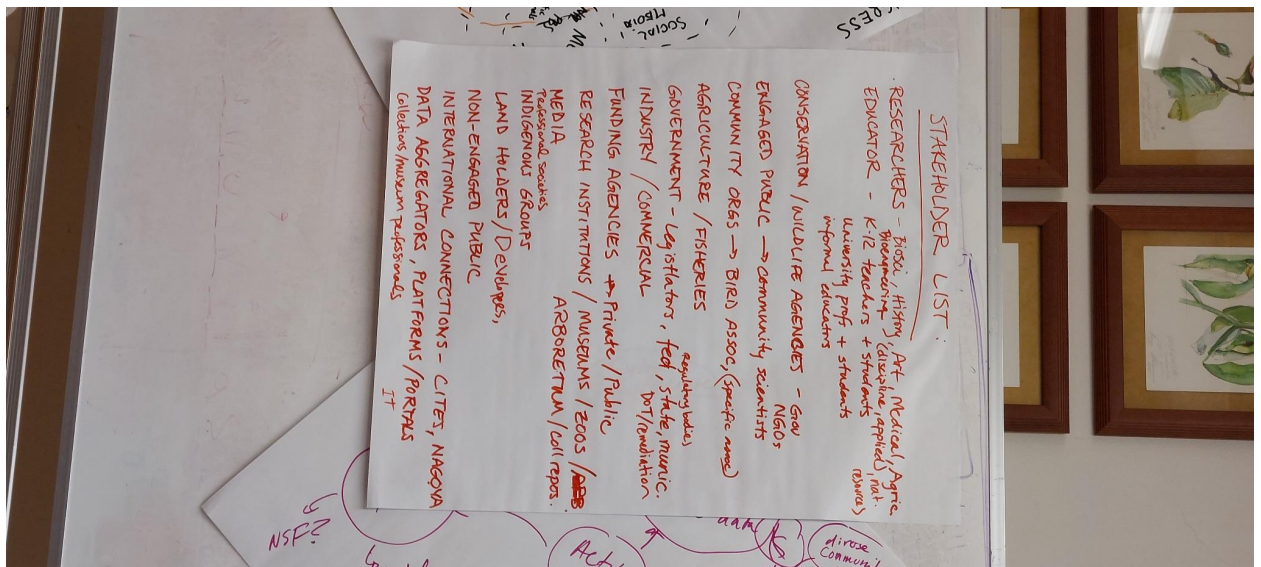
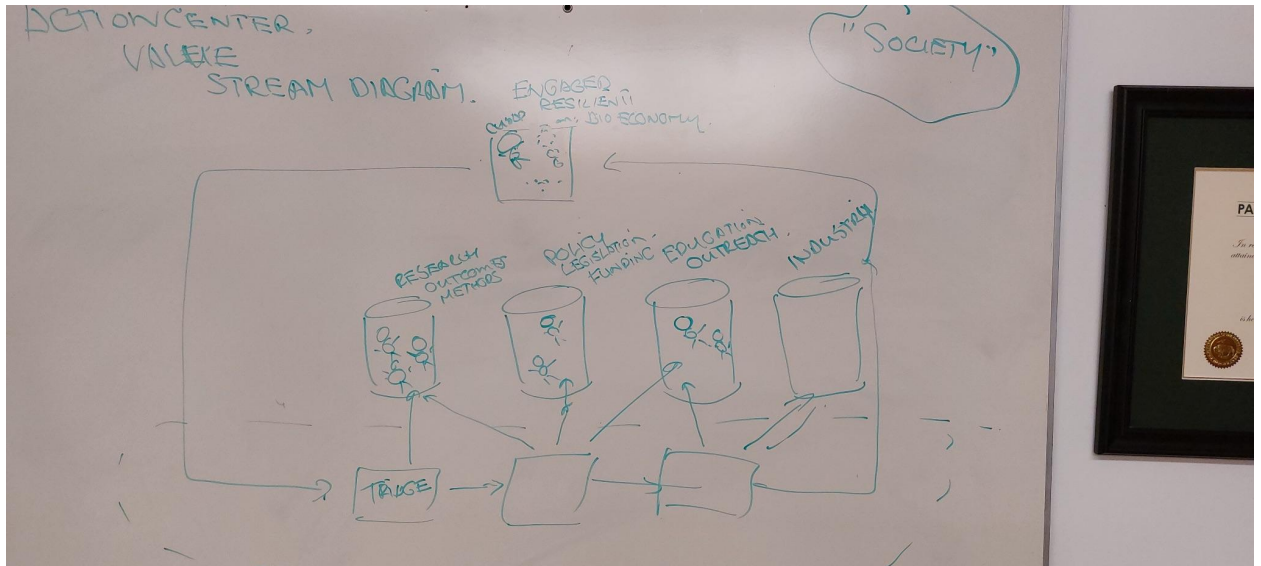
1. Made aware of resources GBIF / iDigBio through Ph Thesis through colleagues/peers not conferences word on the street
2. Identified question: interested in collect as much plant data and model how this would change given climate change
3. Reaches out to Action Center Hotline/Helpdesk (everything documented in ticket)
 - a. Someone at Action Center gets assigned the case/ticket
 - b. Computational group
 - i. Connects him with Lifemapper (Consults with Lifemapper and Charlie realizes its beyond the technical capacity; they suggest inclusion of line item to build out resolution for Lifemapper in grant; Mutual benefit: Lifemapper team improves tool with input)
 - c. Grants
 - i. Tells Charlie to check NSF for similarly funded projects
 - ii. Inform Charlie about grant programs that could be applied to
 - iii. Provides a clearinghouse for post-doc positions
 - d. Research Coordination
 - i.
 - e. Stewardship
 - i. Let's Charlie know about what MTAs
 - f. Informs Charlie on upcoming workshops
 - g. Tells Charlie that they can help when
- Action Center uses metrics collected ticket information to:
 - Be proactive in creating or expanding tools that are needed
 - Host workshops on specific topics

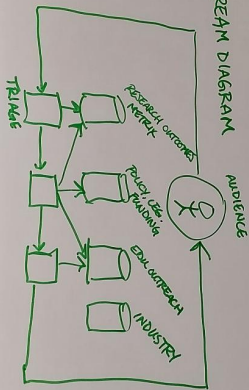
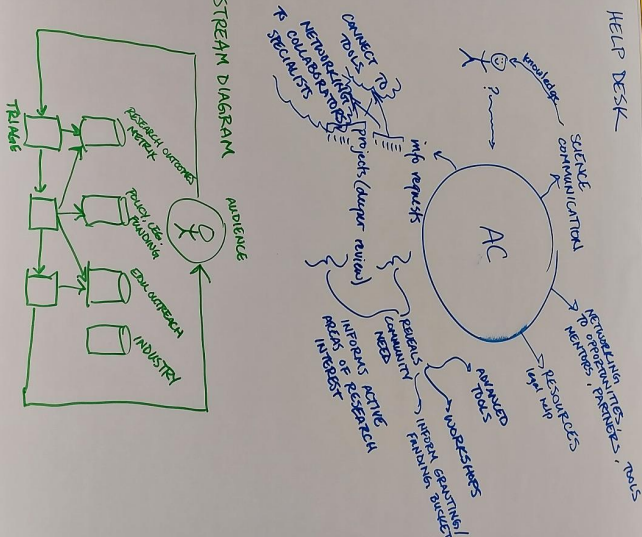
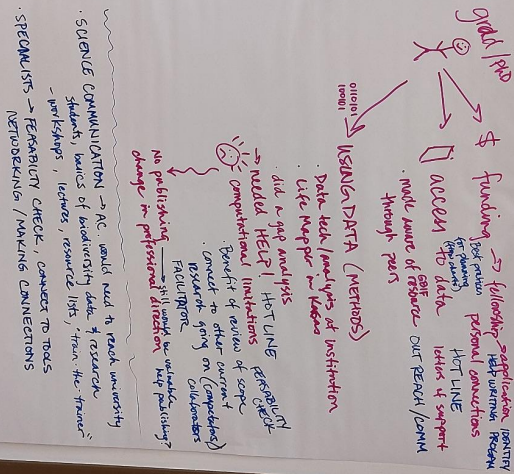
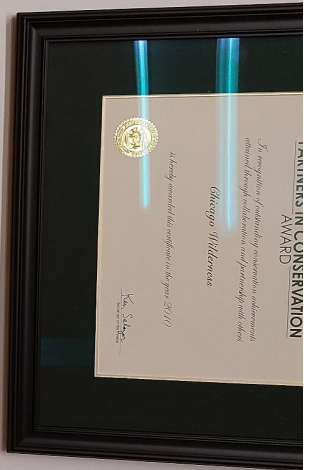
-- Getting the funding

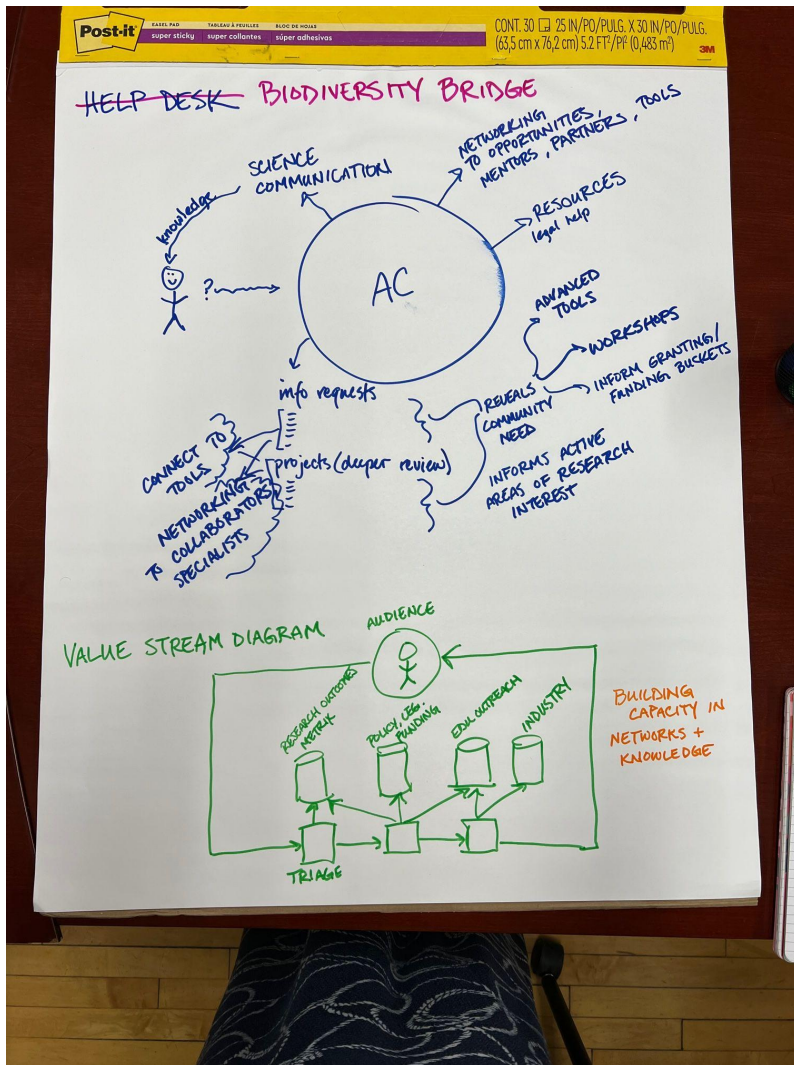
1. Feasibility Study
 - a. Determines best location to collect specimens
 - i. Identifies local collaborators
 - ii. Provides checklist of permits
 - b.
2. Funding
 - a. communication with NSF program officers or similar facilitating actors
 - b. institutional grant writing capacity give Charlie a leg up in putting in a competitive proposal
 - c.
3. Determine best place to publish
 - a. Funding for open access

4.

Congressional Staffer Use Case







updated