<u>CPSG Strategic Planning Workshop</u> <u>May 2019</u>

Technology Working Group Notes

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TIME Cover Activity – Technology Group



Who we are: cutting edge, innovative technology creators [adaptors]

- Integrating data sets
 - o Global climate: status, trends
 - o Human population: status, distribution, trends, activities
 - Socio-economic drivers of human activity, underlying behavior
- Working to make technology a positive concept
- Scaling up how we do things
- Utilizing <u>all</u> new technologies to gather information
- Technology as a tool to do what?
- Using <u>current</u> relevant information
- Combining assessment with evaluation
- Knowledge = information & assessment
- Developing & adapting tools to integrate multi-disciplinary data to inform species conservation action
- Merging the power of the tech world with the passion of the conservation world

What we did

- Convened a group of leaders in "big data" technology and creative conservation thinkers in a weeklong workshop where we used CPSG processes to create an implementation and assessment plan
- Created a real-time global conservation data portal owned by, and accessible to, the people who
 want to save the world
 - Using the knowledge from the portal to save the ocean's coral by bringing together climatology, oceanographic, and biological communities to reverse the decline of corals in the Great Barrier Reef
- Developed tools, technology, and methods to transform information into species conservation action
- Inspired a global "pop-up alert system", as part of a larger online species conservation dashboard, that highlights current species status and conservation successes and challenges
 - o Reversed the amphibian decline
 - o Identified a new crisis stopped disease transmission
 - Saved the cacao trees
 - Saved the world's fisheries

<u>Technology Group: Equity in Access to Knowledge – Day 2 Discussions</u>

Goal is to develop critical knowledge resources for effective species conservation planning that are open and accessible. Transform disparate, relevant data into accessible conservation knowledge by efficiently identifying, assembling, integrating, and analyzing diverse information. Transform the way conservation decisions are made, with open and accessible critical knowledge resources.

Open = freely available for any use

Accessible = data are in a format that can be used, with tools to use or process those data to answer your questions, for those communities that need to use it

Knowledge = data analyzed so that it can be applied to help answer the problem

3-5 Year Goal:

- Identify
- Assemble
- Integrate
- Make accessible
- Analyze



CPSG's strengths

- Convening
- Facilitating collaborations
- Existing networks
- Resourcefulness (working with what's on hand)

- Years of experience in conservation planning
- Already have globally used methods & tools

How do we do this?

- Develop iteratively collaborative relationships with the tech community around developing innovative tools for conservation planning, with the conservation community
 - Identify existing data integration efforts
- Collaborate with conservation relevant organizations to promote open and accessible data sharing in both directions
- Develop better understanding of problems that new tools can help us solve
 - Integrative
 - o Analytical
 - o Process

Brainstorm and thematic clustering of key issues and ideas pertinent to use of technology for improved conservation data access

- Tech connections:
 - Pitching to big tech companies
 - Develop a collaboration among conservation practitioners and tech leaders
 - o Identify who we know in tech community, high up person
 - Connect and collaborate with others with expertise on other relevant technologies
 - Make connections with data analytics organizations
 - Build relationships and a network of data/information organizations
- Conservation relevant connections:
 - o Make basic species information available on-line (consider existing databases)
 - Develop networks with academic groups to find the next generation of Innovative Planners
 - o Think about new partnerships; think outside the box a bit
 - Ensure scope of relevant info and contacts is wide enough and make the collaborations/connections
 - Establish common goals and objectives with key holders of knowledge to share, integrate, analyze, etc.
 - Open dialogue with relevant IUCN people re. integration of knowledge products, improvements, enhancing effectiveness
 - Work with Red List processes and other species Specialist Groups to make assessments, support conservation planning
- Data integration connections
 - Envision & develop multiple levels of data/information scaled to different conservation decision challenges
 - o Species and ecosystem info must integrate
 - o Can we use the Green List to help move this forward?
 - o All analysis needs to connect
 - o Layered information systems to visualize species/threats/habitats/protected areas, etc.
 - all exist but can't be seen in one place INTEGRATE
 - Identify and continuously refine the list of key resources

Process tool development

- o Reproduce CPSG workshop in social media
- Transmit conservation knowledge to the communities through social media, radio, TV, and organizing meetings
- Better tools to evaluate success
- o Include feedback in connected assessments
- Learn how to translate human population/demographic/economic model predictions into expected wildlife impacts
- Conservation gaming use gaming to help develop plans and solution
- o Iterative info harvesting and assessment is essential
- Promote development of missing resources
- Customize species knowledge dashboards for leaders/practitioners
- o Facilitate (via tools) exploration of solutions (e.g. Miradi VAM link)
- Develop a clear description of how we think data analytics could help scale up conservation
- Match complexity of tools with complexity of issues simple tools for simple issues
- o Learn from Open Standards how did they do it and how can we do it?
- Need to deal with uncertainty
- o Hold a workshop to brainstorm automation of basic/pilot PVAs
- Automate 1st cut species assessments
- o Multi-species PVA modeling tools
- Learn what conservation relevant parameters can be predicted from social/consumer data
- o Versions of our tools put into open sandbox for world to improve
- Identify and develop key CPSG resources for planning based on all other available resources – "CPSG Last-Mile Technology"
- o Crate "CPSG Valley" for innovation of scalable planning ideas and tools
- Our outputs must include the language/format of all formal assessments (Red List, etc.)
 for more policy impact

Training and capacity

- o Integrate our tools into (leading) university curricula worldwide
- Create "virtual office" where we all work and interact